PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

North Manchester Foundry, Inc.
205 Wabash Road
North Manchester, Indiana 46962

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 169-9014-00019	
Original signed by Janet G. McCabe Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: May 14, 2002 Expiration Date: May 14, 2007

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates stationary gray iron and steel foundry source.

Responsible Official:	David L. Boyd
Source Address:	205 Wabash Road, North Manchester, Indiana 46962
Mailing Address:	P.O. Box 345, North Manchester, Indiana 46962
General Source Phone Number:	(219) 982-2191
SIC Code:	3321
County Location:	Wabash
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) scrap handling process, constructed in 1968, including one (1) bridge crane and one (1) scale, identified as process SI, not exhausting through a stack, maximum rated capacity: 10 tons of metal per hour.

(b) One (1) melting and casting process consisting of the following emission units and pollution control devices:

(1) One (1) 1.16 million British thermal unit per hour natural gas-fired scrap charge pre-heater, constructed in 1970, identified as CP, exhausting inside the building, some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1.

(2) Three (3) electric induction (scrap iron) furnaces, constructed in 1973 and modified in 1995, identified as IF1, IF2, and IF3, exhausting inside the building, some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, maximum charge rate: 3.6 tons per hour, each.

(3) One (1) electric induction (stainless steel) furnace, constructed in 1966, identified as IF4, maximum charge rate: 1.0 ton per hour.

(4) Four (4) natural gas-fired ladle heaters, constructed in 1970, identified as LH1, LH2, LH3, and LH4, combined maximum capacity: 2.6 million British thermal units per hour, total.

(5) One (1) molding, pouring and cooling line, identified as the disamatic molding/pouring line, part of operation MP, constructed in 1993, with no controls on emissions and the emissions are exhausted via the production building general ventilation, capacity: 30 tons of molding sand and 5 tons of metal per hour.

(6) One (1) molding, pouring and cooling line, identified as the disaforma molding/pouring line, part of operation MP, constructed in 1986, with no controls on emissions and the emissions are exhausted via the production building general ventilation, capacity: 60 tons of molding sand and 10 tons of metal per hour.

(7) One (1) molding, pouring and cooling line, identified as the pallet line and floor stations, part of operation MP, constructed prior to 1973, with no controls on emissions and the emissions are exhausted via the production building general ventilation, capacity: 6 tons of molding sand and 1 ton of metal per hour.

(c) One (1) shakeout operation, constructed in 1973, identified as operation CCS, with PM and PM_{10} emissions controlled by baghouse DC2 and exhausting through stack S2, maximum capacity: 80 tons of sand and 10 tons of metal per hour.

(d) One (1) cleaning and finishing process consisting of the following emission units and pollution control devices:

(1) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL1, with PM and PM_{10} emissions controlled by baghouse DC5 and exhausting through stack S4, maximum capacity: 1.0 ton of castings per hour.

(2) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL2, with PM and PM_{10} emissions controlled by baghouse DC6 and exhausting through stack R5, maximum capacity: 3.0 tons of castings per hour.

(3) One (1) shot blast cleaner, constructed in 1974, identified as CCL3, with PM and PM_{10} emissions controlled by baghouse DC7 and exhausting through stack S10, maximum capacity: 2.5 tons of castings per hour.

(4) Seven (7) pedestal wheel grinders, with six (6) constructed in 1993 and one (1) constructed in 1994, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, with PM and PM_{10} emissions from all of the grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.25 ton of castings per hour, each.

(5) Two (2) dual wheel grinders, constructed in 1993, identified as GR3 and GR4, with PM and PM_{10} emissions from both grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.5 ton of castings per hour, each.

(6) One (1) 3.2 million British thermal unit per hour natural gas-fired annealing oven, constructed in 1967, identified as HT1, exhausting through stack S9, maximum capacity: 1.5 tons of iron per hour.

(e) One (1) sand handling process consisting of the following emission units and pollution control devices:

(1) One (1) muller, constructed in 1987, identified as SH, with PM and PM_{10} emissions controlled by baghouse DC3 and exhausting through stack S6 or S6R, maximum

capacity: 100 tons of sand per hour.

(2) One (1) mold sand handling system, constructed in 1965, identified as SH, with PM and PM_{10} emissions controlled by baghouse DC3 and exhausting through stack S6, maximum capacity: 100 tons of sand per hour.

(3) One (1) core sand handling system, constructed in 1970, identified as SH, exhausting through stack I3 with some particulate exhausting through small filters, capacity: 50 tons of sand per hour.

(f) One (1) core and mold preparation process consisting of the following emission units and pollution control devices:

(1) Two (2) mold making lines, identified as DM1, one constructed in 1986 with a capacity of 60 tons of sand per hour and one constructed in 1993 with a capacity of 30 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(2) One (1) pallet molding operation, constructed in 1965, capacity: 5 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(3) Seven (7) shell core making machines, constructed in 1981, identified as part of CM, capacity: 2.0 tons of pre-mixed sand per hour, total.

(4) One (1) air set core machine, constructed in 1997, identified as part of CM, capacity: 1.5 tons of sand, 3.91 pounds of alphaset and 1.30 pounds of alphacure per hour.

(5) Two (2) isocure processes, constructed in 1980, identified as part of CM, with catalyst emissions controlled by a fume scrubber, exhausting through stack S8, capacity: 2.0 tons of sand per hour, 80 pounds of isocure per hour, and 20 pounds of catalyst (Dimethylethylamine) per hour, total.

(6) One (1) 0.5 million British thermal unit per hour (MMBtu/hr) natural gas-fired core baking oven, constructed in 1970, identified as part of CM, exhausting through two (2) stacks, identified as S7A and S7B.

(g) Inoculation operations, operating since approximately 1973, exhausting inside the building, with some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, capacity: 10 tons of metal per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Degreasing operations that do not exceed 145 gallons per 12 month period, except if subject to 326 IAC 20-6, including one (1) parts washer, constructed in 1987, equipped with a lid. There are no halogenated solvents used in the degreasing operations. [326 IAC 8-3-2]

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3]

(c) Any of the following structural steel activities, constructed in 1980:

(1) Cutting 200,000 linear feet or less of one inch (1") plate or equivalent. [326 IAC 6-3]

(2) Using 80 tons or less of welding consumables. [326 IAC 6-3]

(d) Grinding and machining operations, constructed in 1980, controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3]

(e) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than insignificant activity thresholds:

(1) Maintenance painting, constructed in 1980; core making. [326 IAC 6-3]

(2) Receipt, unloading, storage of molding sand. [326 IAC 6-3]

(3) Pattern Shop woodworking activities, constructed in 1973. [326 IAC 6-3]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22); and

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a

claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.

(c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee’s control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:

The requirement from F 169-6298-00019, issued on June 25, 1997, Condition C.1, listing requirements pursuant to 326 IAC 2-8, is not applicable because this source has requested a Title V, Part 70, Operating Permit. Therefore, the source is subject to 326 IAC 2-7, Part 70, and the 326 IAC 2-8, FESOP, limits are not required.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirements that exists independent of this permit shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20 (b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy any records that must be kept under the conditions of this permit;

(c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than one hundred (100) pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a flow rate or conductivity, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee

shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(a) One (1) scrap handling process, constructed in 1968, including one (1) bridge crane, and one (1) scale, identified as process SI, not exhausting through a stack, maximum rated capacity: 10 tons of metal per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the scrap handling process shall not exceed 19.2 pounds per hour, when operating at a process weight rate of 10 tons of metal per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Nonapplicable Condition

Condition D.1.2 from F 169-6298-00019, issued on June 25, 1997, which states that the particulate matter (PM) emissions to the atmosphere from the scrap handling process shall be limited to 0.68 pounds per hour, and that the level of contaminants in the scrap used shall be equal or lower than that used during the last stack test which demonstrated compliance, is not incorporated because the limit in the FESOP was truncated so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM and PM_{10} less than 100 tons per year. Since this source is a major source pursuant to 326 IAC 2-2, PSD, and 326 IAC 2-7, Part 70, the truncated hourly limits are not necessary. The facility will be required to comply with the hourly PM emission limit in Condition D.1.1. Therefore, Condition D.1.2 from F 169-6298-00019 is hereby rescinded.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

There are no specific Compliance Determination Requirements applicable to these emission units.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.4 Visible Emissions Notations

(a) Visible emission notations of the scrap handling exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.5 Record Keeping Requirements

(a) To document compliance with Condition D.1.4, the Permittee shall maintain records of visible emission notations of the scrap handling exhaust once per shift.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(b) One (1) melting and casting process consisting of the following emission units and pollution control devices:

(1) One (1) 1.16 million British thermal unit per hour natural gas-fired scrap charge pre-heater, constructed in 1970, identified as CP, exhausting inside the building, some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1.

(2) Three (3) electric induction (scrap iron) furnaces, constructed in 1973 and modified in 1995, identified as IF1, IF2, and IF3, exhausting inside the building, some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, maximum charge rate: 3.6 tons per hour, each.

(3) One (1) electric induction (stainless steel) furnace, constructed in 1966, identified as IF4, maximum charge rate: 1.0 ton per hour.

(4) Four (4) natural gas-fired ladle heaters, constructed in 1970, identified as LH1, LH2, LH3, and LH4, combined maximum capacity: 2.6 million British thermal units per hour, total.

(5) One (1) molding, pouring and cooling line, identified as the disamatic molding/pouring line, part of operation MP, constructed in 1993, with no controls on emissions and the emissions are exhausted via the production building general ventilation, capacity: 30 tons of molding sand and 5 tons of metal per hour.

(6) One (1) molding, pouring and cooling line, identified as the disaforma molding/pouring line, part of operation MP, constructed in 1986, with no controls on emissions and the emissions are exhausted via the production building general ventilation, capacity: 60 tons of molding sand and 10 tons of metal per hour.

(7) One (1) molding, pouring and cooling line, identified as the pallet line and floor stations, part of operation MP, constructed prior to 1973, with no controls on emissions and the emissions are exhausted via the production building general ventilation, capacity: 6 tons of molding sand and 1 ton of metal per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the three (3) electric induction furnaces for melting iron (IF1 through IF3) shall not exceed 9.67 pounds per hour, each, when operating at a process weight rate of 3.6 tons of metal per hour, each.

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the one (1) electric induction furnace for melting steel (IF4) shall not exceed 4.10 pounds per hour, when operating at a process weight rate of 1.0 ton of metal per hour.

(c) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the molding, pouring and cooling operations at the one (1) disamatic molding/pouring line (part of MP) shall not exceed 41.3 pounds per hour, when operating at a process weight rate of 35 tons of sand and metal per hour.

(d) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the molding, pouring and cooling operations at the one (1) disaforma molding/pouring line (part of MP) shall not exceed 47.8 pounds per hour, when operating at a process weight rate of 70 tons of sand and metal per hour.

(e) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the molding, pouring and cooling operations at the one (1) pallet line and floor stations (part of MP) shall not exceed 15.1 pounds per hour, when operating at a process weight rate of 7.0 tons of sand and metal per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 PSD Minor Modification Limit [326 IAC 2-2] [40 CFR 52.21]

(a) The iron throughput to the total of the four (4) electric induction furnaces, IF1 through IF4, shall not exceed 34,700 tons per consecutive twelve (12) month period, where each ton of steel melted is equal to one tenth (0.1) ton of iron throughput. The PM emissions shall not exceed 0.9 pound per ton when melting iron and 0.1 pound per ton when melting steel, and the PM_{10} emissions shall not exceed 0.86 pound per ton when melting iron and 0.09 pound per ton when melting steel. Therefore, the potential to emit PM shall be limited to 15.7 tons per year, which is less than 25 tons per year, and the potential to emit PM_{10} shall be limited to 14.9 tons per year, which is less than 15 tons per year, from the total of the four (4) furnaces, IF1 through IF4, and this modification was a minor modification to an existing major source, pursuant to 326 IAC 2-2, PSD, and 40 CFR 52.21.

(b) The throughput of metal at the one (1) disaforma molding/pouring line shall not exceed 11,826 tons per consecutive twelve (12) month period, the PM emission rate shall not exceed 4.2 pounds per ton of metal throughput, and the PM_{10} emission rate shall not exceed 2.06 pounds per ton of metal throughput. This will limit the potential to emit of PM and PM_{10} from the combination of this facility and the one (1) mold making line, also constructed in 1986, to less than 25 tons per year and 15 tons per year, respectively. Therefore, this modification is a minor modification to an existing major source, and the requirements of 326 IAC 2-2, PSD, and 40 CFR 52.21 are not applicable.

(c) The throughput of metal at the one (1) disamatic molding/pouring line shall not exceed 7,750 tons per consecutive twelve (12) month period, the PM emission rate shall not exceed 4.2

pounds per ton of metal throughput, and the PM_{10} emission rate shall not exceed 2.06 pounds per ton of metal throughput. This will limit, in combination with the limit in Condition D.3.2, shall limit the potential to emit PM from the total of the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, identified as GR3 and GR4, one (1) disamatic molding/pouring line, and the one (1) mold making line, identified as part of DM1, all considered part of the same modification, to less than 25 tons per year and the potential to emit PM_{10} to less than 15 tons per year from this modification. Therefore, this modification is a minor modification to an existing major source, and the requirements of 326 IAC 2-2, PSD, and 40 CFR 52.21 are not applicable.

D.2.3 Nonapplicable Conditions

(a) Operation Conditions 6(a) and 9 from CP 169-4073-00019, issued on November 21, 1995, which require that particulate matter (PM) emissions from the baghouse shall be limited to 12.5 pounds per hour, the pressure drop across the baghouse shall remain within the range of 2 - 10 inches of water, the pressure drop records shall be recorded every hour and made available upon request, the Permittee shall inspect the system and air pollution control device in accordance with the manufacturer's specifications, the opacity from the baghouse shall not exceed ten percent (10%) for any six minute average, and the dust collectors (baghouses) shall be in operation at all times the Nos. 1-3 Mainline furnaces are in operation, are not incorporated into this permit because operation of the baghouse is not required to demonstrate compliance with any rules or limitations and a ten percent (10%) opacity limit is not required to show compliance with any applicable rule. Therefore, Operation Conditions 6(a) and 9 from CP 169-4073-00019, issued on November 21, 1995, are hereby rescinded.

(b) Operation Condition D.2.2 from F 169-6298-00019, issued on June 25, 1997, which states that the particulate matter (PM) emissions from the metal melting and casting process shall be limited to 8.82 pounds per hour, is not incorporated because the limit in the FESOP was truncated so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM less than 100 tons per year. This source is a major source pursuant to 326 IAC 2-7, Part 70. Therefore, no truncated pound per hour emission limit is necessary and the melting operations must comply with the hourly emission limitations in Condition D.2.1. Therefore, Condition D.2.2 from F 169-6298-00019 is hereby rescinded.

(c) Operation Condition D.2.3 from F 169-6298-00019, issued on June 25, 1997, which states that the PM_{10} emissions from the scrap charge preheater, identified as CP, and three scrap iron electric induction furnaces, identified as IF1, IF2, and IF3, controlled by baghouse DC1, shall be limited to 6.18 pounds per hour, and the PM_{10} emissions from the pouring line operation, identified as MP, and the shakeout operation, identified as CCS, both controlled by baghouse DC2, shall be limited to 3.37 pound per hour, is not applicable because the PM_{10} limit in the FESOP existed so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM_{10} less than 100 tons per year. This source is a major source pursuant to 326 IAC 2-7, Part 70. Therefore, Operation Condition D.2.3 from F 169-6298-00019 is hereby rescinded.

(d) Operating Conditions D.2.5, D.2.7 and D.2.9 of F 169-6298-00019, issued on June 25, 1997, and AAF 169-8859-00019, issued on October 2, 1997, which require that each control unit associated with the melting and casting process shall be operated at all times the equipment are in operation and compliance monitoring and reporting for these processes and baghouse DC1, are not applicable because operation of the baghouse (DC1) is not required for the melting operations to comply with any applicable rules or conditions of this proposed permit, as explained in (a) of this Condition.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.2.2(a), the Permittee shall perform PM and PM_{10} testing to verify that the furnaces are in compliance with the pound per ton emission limits in Condition D.2.2(a), when melting steel and iron, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. PM_{10} includes filterable and condensible PM_{10}.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the general building ventilation baghouse stack (S1) and the general building exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.7 Record Keeping Requirements

(a) To document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the general building ventilation baghouse stack (S1) and the general building exhausts once per shift.

(b) To document compliance with Condition D.2.2, the Permittee shall maintain monthly records of the metal throughput at the disaforma molding/pouring line, the disamatic molding/pouring line, and the total of the four (4) furnaces, IF1 through IF4.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(c) One (1) shakeout operation, constructed in 1973, identified as operation CCS, with PM and PM_{10} emissions controlled by baghouse DC2 and exhausting through stack S2, maximum capacity: 80 tons of sand and 10 tons of metal per hour.

(d) One (1) cleaning and finishing process consisting of the following emission units and pollution control devices:

(1) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL1, with PM and PM_{10} emissions controlled by baghouse DC5 and exhausting through stack S4, maximum capacity: 1.0 ton of castings per hour.

(2) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL2, with PM and PM_{10} emissions controlled by baghouse DC6 and exhausting through stack R5, maximum capacity: 3.0 tons of castings per hour.

(3) One (1) shot blast cleaner, constructed in 1974, identified as CCL3, with PM and PM_{10} emissions controlled by baghouse DC7 and exhausting through stack S10, maximum capacity: 2.5 tons of castings per hour.

(4) Seven (7) pedestal wheel grinders, with six (6) constructed in 1993 and one (1) constructed in 1994, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, with PM and PM_{10} emissions from all of the grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.25 ton of castings per hour, each.

(5) Two (2) dual wheel grinders, constructed in 1993, identified as GR3 and GR4, with PM and PM_{10} emissions from both grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.5 ton of castings per hour, each.

(6) One (1) 3.2 million British thermal unit per hour natural gas-fired annealing oven, constructed in 1967, identified as HT1, exhausting through stack S9, maximum capacity: 1.5 tons of iron per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shakeout operations (CCS) exhausting to baghouse DC2 shall not exceed 50.2 pounds per hour, when operating at a process weight rate of 90 tons of sand and metal per hour.

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shotblaster (CCL1) exhausting to baghouse DC5 shall not exceed 4.10 pounds per hour, when operating at a process weight rate of 1.0 ton of castings per hour.

(c) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shotblaster (CCL2) exhausting to baghouse DC6 shall not exceed 8.56 pounds per hour, when operating at a process weight rate of 3.0 tons of castings per hour.

(d) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the seven (7) pedestal wheel grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) exhausting to baghouse DC6 shall not exceed 5.97 pounds per hour, total, when operating at a process weight rate of 1.75 tons of castings per hour, total.

(e) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the two (2) dual wheel grinders (GR3 and GR4) exhausting to baghouse DC6 shall not exceed 4.10 pounds per hour, total, when operating at a process weight rate of 1.0 ton of castings per hour, total.

(f) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shotblaster (CCL3) exhausting to baghouse DC7 shall not exceed 7.58 pounds per hour, when operating at a process weight rate of 2.5 tons of castings per hour.

The pounds per hour limitations for (b) through (f) were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The pounds per hour limitation for (a) was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.3.2 PSD Minor Modification Limit [326 IAC 2-2] [40 CFR 52.21]

The total throughput of castings at the seven (7) pedestal wheel grinders shall not exceed 10,220 tons per twelve (12) consecutive month period and the total throughput of castings at the two (2) dual wheel grinders shall not exceed 5,840 tons per twelve (12) consecutive month period, the potential to emit PM shall be limited to less than 2.40 pounds per hour and the potential to emit PM_{10} shall be limited to less than 2.40 pounds per hour. This limit, in combination with Condition D.2.2(c), shall limit the potential to emit PM from the total of the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, identified as GR3 and GR4, one (1) disamatic molding/pouring line, and the one (1) mold making line, identified as part of DM1, all considered part of the same modification, to less than 25 tons per year and the potential to emit PM_{10} to less than 15 tons per year from this modification. Therefore, this modification is a minor modification to an existing major source, and the requirements of 326 IAC 2-2, PSD, and 40 CFR 52.21 are not applicable.

D.3.3 Nonapplicable Conditions

(a) Operation Condition D.3.2 from F 169-6298-00019, issued on June 25, 1997, which states that, pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the facilities and operations of the metal cleaning and finishing process shall be limited to 9.95 pounds per hour, is not applicable because each cleaning and finishing process has a separate PM emission limitation pursuant to 326 IAC 6-3-2, Process Operations, as specified in Condition D.3.1. Therefore, Condition D.3.2 of F 169-6298-00019 is hereby rescinded.

(b) Operation Condition D.3.3 from F 169-6298-00019, issued on June 25, 1997, and AAF 169-8859-00019, issued on October 2, 1997, which states that the PM_{10} emissions from the shakeout operation, identified as CCS, and the pouring line operation of the melting and casting process, identified as Unit MP, both controlled by baghouse DC2, shall be limited to 3.37 pounds per hour, the PM_{10} emissions from the casting cleaner shotblaster, identified as CCL1, controlled by baghouse DC5, shall be limited to 1.12 pounds per hour, the PM_{10} emissions from the casting cleaner shotblaster, identified as CCL2, controlled by baghouse DC-6, shall be limited to 0.75 pounds per hour, the PM_{10} emissions from the shot blast cleaner, identified as CCL3, controlled by baghouse DC7, shall be limited to 1.5 pounds per hour, the PM_{10} from the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, and the two (2) dual wheel grinders, identified as GR3, and GR4, all controlled by baghouse DC6, shall be limited to 1.68 pounds per hour, is not applicable because the PM_{10} limit in the FESOP existed so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM_{10} less than 100 tons per year. This source is a major source pursuant to 326 IAC 2-7, Part 70. The PM_{10} emissions from facilities constructed after August 7, 1977, are limited in Condition D.3.2 to make those modifications minor modifications to an existing major source. Therefore, the PM_{10} emission limitations from this previous permit are not required, and Operation Condition D.3.3 of F 169-6298-00019 is hereby rescinded.

(c) Operation Conditions D.3.5, D.3.6, D.3.8 and D.3.9 of F 169-6298-00019, issued on June 25, 1997, and AAF 169-8859-00019, issued on October 2, 1997, which state that baghouses DC4, DC5 and DC7 shall be operated with the pressure drop range of 4-6 inches of water across the baghouse and these parameters shall be monitored daily when each control unit is in operation, daily visible emission notations of the units shall be performed, a Preventive Maintenance Plan is required of the facilities, the Permittee shall maintain daily records at baghouses DC4, DC5 and DC7 of the inlet and outlet differential static pressure, clean operational status, blower operational status, and visible observations, and a quarterly summary of this information shall be submitted, is not applicable because, although, all of the baghouses (DC2, DC5, DC6 and DC7) must be operated at all times when the equipment listed as exhausting to that baghouse is in operation in order for each facility to comply with 326 IAC 6-3-2, Process Operations, the facilities exhausting to baghouses DC4, DC5 and DC6 have allowable PM emission rates less than ten (10) pounds per hour and there are no limits keeping the facilities out of a particular rule. Baghouse DC4 does not exist at this source. Therefore, there is no Preventive Maintenance Plan or mandatory Compliance Monitoring for those facilities and the associated baghouses (DC4, DC5 and DC7), and Conditions D.3.5, D.3.6, D.3.8 and D.3.9 of F 169-6298-00019 are hereby rescinded.

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the shakeout operations (CCS), the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, and the two (2) dual wheel grinders, identified as GR3, and GR4, and their control devices.

Compliance Determination Requirements

D.3.5 Particulate Matter (PM and PM_{10})

(a) In order to demonstrate compliance with Condition D.3.1, the baghouse (DC2) shall be in operation and control emissions from the shakeout process (CCS) at all times when the shakeout process is in operation.

(b) In order to demonstrate compliance with Condition D.3.1, the baghouse (DC5) shall be in operation and control emissions from the shotblaster (CCL1) at all times when the

shotblaster is in operation.

(c) In order to demonstrate compliance with Condition D.3.1, the baghouse (DC6) shall be in operation and control emissions from the shotblaster (CCL2) at all times when the shotblaster is in operation.

(d) In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the baghouse (DC6) shall be in operation and control emissions from the seven (7) pedestal grinders at all times when the any of the seven (7) pedestal grinders are in operation.

(e) In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the baghouse (DC6) shall be in operation and control emissions from the two (2) dual wheel grinders at all times when the either of the two (2) dual wheel grinders are in operation.

(f) In order to demonstrate compliance with Condition D.3.1, the baghouse (DC7) shall be in operation and control emissions from the shotblaster (CCL3) at all times when the shotblaster is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.6 Visible Emissions Notations

(a) Visible emission notations of the shakeout, seven (7) pedestal grinders and two (2) dual wheel grinders baghouse stack exhausts (DC2 and DC6) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.7 Parametric Monitoring

(a) The Permittee shall record the total static pressure drop across the baghouse (DC2) used in conjunction with the shakeout process (CCS), at least once per shift when the shakeout process is in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(b) The Permittee shall record the total static pressure drop across the baghouses (DC6) used in conjunction with the seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4), at least once per shift when the seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4) are in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the shakeout operation (CCS), seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4), when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.3.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.10 Record Keeping Requirements

(a) To document compliance with Condition D.3.6, the Permittee shall maintain records of visible emission notations of the shakeout baghouse (DC2) and the seven (7) pedestal grinders

(GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4) baghouse (DC6) stack exhausts once per shift.

(b) To document compliance with Condition D.3.7, the Permittee shall maintain the following:

(1) Records of the inlet and outlet differential static pressure during normal operation when venting to the atmosphere once per shift.

(2) Documentation of the dates vents are redirected.

(c) To document compliance with Condition D.3.8, the Permittee shall maintain records of the results of the inspections required under Condition D.3.8 and the dates the vents are redirected.

(d) To document compliance with Condition D.3.2, the Permittee shall maintain monthly records of the castings throughput at the seven (7) pedestal wheel grinders and the two (2) dual wheel grinders.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(e) One (1) sand handling process consisting of the following emission units and pollution control devices:

(1) One (1) muller, constructed in 1987, identified as SH, with PM and PM_{10} emissions controlled by baghouse DC3 and exhausting through stack S6 or S6R, maximum capacity: 100 tons of sand per hour.

(2) One (1) mold sand handling system, constructed in 1965, identified as SH, with PM and PM_{10} emissions controlled by baghouse DC3 and exhausting through stack S6, maximum capacity: 100 tons of sand per hour.

(3) One (1) core sand handling system, constructed in 1970, identified as SH, exhausting through stack I3 with some particulate exhausting through small filters, capacity: 50 tons of sand per hour.

(f) One (1) core and mold preparation process consisting of the following emission units and pollution control devices:

(1) Two (2) mold making lines, identified as DM1, one constructed in 1986 with a capacity of 60 tons of sand per hour and one constructed in 1993 with a capacity of 30 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(2) One (1) pallet molding operation, constructed in 1965, capacity: 5 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(3) Seven (7) shell core making machines, constructed in 1981, identified as part of CM, capacity: 2.0 tons of pre-mixed sand per hour, total.

(4) One (1) air set core machine, constructed in 1997, identified as part of CM, capacity: 1.5 tons of sand, 3.91 pounds of alphaset and 1.30 pounds of alphacure per hour.

(5) Two (2) isocure processes, constructed in 1980, identified as part of CM, with catalyst emissions controlled by a fume scrubber, exhausting through stack S8, capacity: 2.0 tons of sand per hour, 80 pounds of isocure per hour, and 20 pounds of catalyst (Dimethylethylamine) per hour, total.

(6) One (1) 0.5 million British thermal unit per hour (MMBtu/hr) natural gas-fired core baking oven, constructed in 1970, identified as part of CM, exhausting through two (2) stacks, identified as S7A and S7B.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the one (1) muller (part of SH) and mold sand handling, exhausting to baghouse DC3, shall not exceed 51.3 pounds per hour, total, when operating at a process weight rate of 100 tons of

sand per hour.

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the core sand handling operations (part of SH) shall not exceed 44.6 pounds per hour, when operating at a process weight rate of 50 tons of sand per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

(a) Any change or modification that increases the potential to emit VOC from any of the seven (7) shell core making machines to 25 tons per year or more, shall cause that facility to become subject to the requirements of 326 IAC 8-1-6, and shall require prior IDEM, OAQ approval.

(b) Any change or modification that increases the potential to emit VOC from the one (1) airset core machine to 25 tons per year or more, shall cause that facility to become subject to the requirements of 326 IAC 8-1-6, and shall require prior IDEM, OAQ approval.

(c) Any change or modification that increases the potential to emit VOC from either of the two (2) mold making lines or the pallet molding line to 25 tons per year or more, shall cause that facility to become subject to the requirements of 326 IAC 8-1-6, and shall require prior IDEM, OAQ approval.

(d) In order to render the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable, the following conditions shall apply to the two (2) isocure processes, constructed in 1980:

(1) The resin usage for each isocure process shall not exceed 5,713 pounds of resin per twelve (12) consecutive month period. DMEA usage for each isocure process shall not exceed 49,514 pounds of DMEA per twelve (12) consecutive month period.

(2) The VOC emissions (not including DMEA) from each of the isocure processes shall not exceed 0.05 pound per pound of resin.

(3) The DMEA emissions from each of the isocure processes shall not exceed 260 pounds per ton of cores.

Therefore, the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) shall not apply.

D.4.3 PSD Minor Modification Limit [326 IAC 2-2] [40 CFR 52.21]

(a) In order to render the requirements of 40 CFR 52.21 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the following conditions shall apply to the two (2) isocure processes, constructed in 1980:

(1) The resin usage for the total of the two (2) isocure process shall not exceed 9,155 pounds of resin per twelve (12) consecutive month period. DMEA usage for the total of the two (2) isocure process shall not exceed 79,342 pounds of DMEA per twelve

(12) consecutive month period.

(2) The VOC emissions (not including DMEA) from the isocure processes shall not exceed 0.05 pound per pound of resin.

(3) The DMEA emissions from the isocure processes shall not exceed 260 pounds per ton of cores.

Therefore, the requirements of 40 CFR 52.21 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) shall not apply.

(b) Any change or modification that increases the potential to emit VOC from the seven (7) shell core making machines, constructed in 1981, to 40 tons per year or more shall cause the seven (7) shell core making machines to become subject to 326 IAC 2-2, PSD, and shall require prior IDEM, OAQ, approval.

(c) Any change or modification that increases the potential to emit VOC from the one (1) mold making line, constructed in 1986, to 40 tons per year or more shall cause the one (1) mold making line to become subject to 326 IAC 2-2, PSD, and shall require prior IDEM, OAQ, approval.

(d) Any change or modification that increases the potential to emit VOC from the one (1) air set core machine, constructed in 1997, to 40 tons per year or more shall cause the one (1) air set core machine to become subject to 326 IAC 2-2, PSD, and shall require prior IDEM, OAQ, approval.

(e) Any change or modification that increases the potential to emit VOC from either of the two (2) mold making lines or the pallet molding line to 40 tons per year or more shall cause the line to become subject to 326 IAC 2-2, PSD, and shall require prior IDEM, OAQ, approval.

(f) The outlet grain loading at the baghouse (DC3), controlling the one (1) muller and one (1) mold sand handling system, shall not exceed 0.015 grains per dry standard cubic foot and the flow rate shall not exceed 26,000 actual cubic feet per minute. This will limit the potential to emit PM from baghouse DC3 to less than 5.71 pounds per hour and the potential to emit PM_{10} to less than 3.42 pounds per hour. Therefore, the potential to emit PM is limited to less than 25 tons per year and the potential to emit PM_{10} is limited to less than 15 tons per year from the addition of the one (1) muller, and the modification is a minor modification to an existing major source.

D.4.4 Nonapplicable Conditions

(a) Operation Condition D.4.2 from F 169-6298-00019, issued on June 25, 1997, which states that pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the facilities and operations of the sand handling process shall be limited to 2.03 pounds per hour, is not applicable because the limit in the FESOP was truncated so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM and PM_{10} less than 100 tons per year. Since this source is a major source pursuant to 326 IAC 2-2, PSD, and 326 IAC 2-7, Part 70, the truncated hourly limits are not applicable. The facilities will be required to comply with the hourly PM emission limit in Condition D.1.4. Therefore, Condition D.4.2 of F 169-6298-00019, is hereby rescinded.

(b) Operation Condition D.4.3 from F 169-6298-00019, issued on June 25, 1997, which states that the PM_{10} emissions from the muller, identified as SH, and the mold sand handling system, identified as SH, both controlled by baghouse DC-3, shall be limited to 4.12 pounds per hour, is not applicable because the PM_{10} limit in the FESOP existed so that the total of

all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM_{10} less than 100 tons per year. Since this source is a major source pursuant to 326 IAC 2-7, Part 70, this PM_{10} emission limitation is not required. Therefore, Condition D.4.3 of F 169-6298-00019 is hereby rescinded.

(c) Operation Condition D.5.2 from F 169-6298-00019, issued on June 25, 1997, which states that the particulate matter (PM) emissions from the facilities and operations of the core and mold preparation process listed in Condition A.2(e) shall be limited to 1.13 pounds per hour, is not applicable because the PM limit in the FESOP was truncated so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM and PM_{10} less than 100 tons per year. Since this source is a major source pursuant to 326 IAC 2-2, PSD, and 326 IAC 2-7, Part 70, the truncated hourly limits are not applicable. The core and mold sand handling operations will be required to comply with the hourly PM emission limit in Condition D.4.1. Therefore, Condition D.5.2 of F 169-6298-00019 is hereby rescinded.

D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the muller, mold sand handling, and core sand handling and their control devices and the two (2) isocure processes.

Compliance Determination Requirements

D.4.6 Particulate Matter (PM and PM_{10})

(a) In order to demonstrate compliance with Condition D.4.1 and D.4.3, the baghouse (DC3) shall be in operation at all times and control emissions from the muller and mold sand handling at all times when the muller and/or mold sand handling is in operation.

(b) In order to demonstrate compliance with Condition D.4.1, the small dust collectors shall be in operation at all times and control emissions from the core sand handling operations at all times when the core sand handling is in operation.

D.4.7 VOC Emissions

Compliance with Conditions D.4.3(a) and D.4.2(d) shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) month period.

D.4.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.4.3, the Permittee shall perform PM and PM_{10} testing to verify that the muller is in compliance with Condition D.4.3(f), utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensible PM_{10}.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.9 Visible Emissions Notations

(a) Visible emission notations of the muller and mold sand handling baghouse stack exhaust (DC3) and small filters controlling the core sand handling shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting

startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.4.10 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse (DC3) used in conjunction with the muller and mold sand handling, at least once per shift when the shakeout process is in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.4.11 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the muller and mold sand handling, when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.4.12 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the require-

ments of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.13 Record Keeping Requirements

(a) To document compliance with Conditions D.4.3(a) and D.4.2(d), the Permittee shall maintain records of the catalyst and resin usage for each month.

(b) To document compliance with Conditions D.4.3(a) and D.4.2(d), the Permittee shall maintain records of the VOC content of binders used at each of the isocure processes each month.

(c) To document compliance with Condition D.4.9, the Permittee shall maintain records of visible emission notations of the muller and mold sand handling baghouse (DC3) stack and the small filters controlling the core sand handling exhausts once per shift.

(d) To document compliance with Condition D.4.10, the Permittee shall maintain the following:

(1) Records of the inlet and outlet differential static pressure for the baghouses during normal operation when venting to the atmosphere once per shift.

(2) Documentation of the dates vents are redirected.

(e) To document compliance with Condition D.4.11, the Permittee shall maintain records of the results of the inspections required under Condition D.4.11 and the dates the vents are redirected.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.14 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.4.3(a) and D.4.2(d) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(g) Inoculation operations, operating since approximately 1973, exhausting inside the building, with some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, capacity: 10 tons of metal per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the inoculation operations shall not exceed 19.2 pounds per hour, when operating at a process weight rate of 10 tons of metal per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.5.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

There are no specific Compliance Determination Requirements applicable to this emission unit.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.3 Visible Emissions Notations

(a) Visible emission notations of the general building ventilation stacks exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.4 Record Keeping Requirements

(a) To document compliance with Condition D.5.3, the Permittee shall maintain records of visible emission notations of the general building ventilation stacks exhausts once per shift.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(a) Degreasing operations that do not exceed 145 gallons per 12 month period, except if subject to 326 IAC 20-6, including one (1) parts washer, constructed in 1987, equipped with a lid. There are no halogenated solvents used in the degreasing operations. [326 IAC 8-3-2]

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3]

(c) Any of the following structural steel and bridge fabrication activities:

(1) Cutting 200,000 linear feet or less of one inch (1") plate or equivalent. [326 IAC 6-3]

(2) Using 80 tons or less of welding consumables. [326 IAC 6-3]

(d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3]

(e) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than insignificant activity thresholds:

(1) Maintenance painting; core making. [326 IAC 6-3]

(2) Receipt, unloading, storage of molding sand. [326 IAC 6-3]

(3) Pattern Shop woodworking activities. [326 IAC 6-3]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste

solvent (by weight) can evaporate into the atmosphere.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 2-2]

Any change or modification that increases the potential to emit VOC from the one (1) insignificant parts washer to 40 tons per year or more of VOC shall cause the source to be subject to the requirements of 326 IAC 2-2 and shall require prior IDEM, OAQ, approval.

D.6.3 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the insignificant activities of brazing equipment, cutting torches, soldering equipment, welding, grinding and machining, maintenance painting, core making, receipt, unloading, storage, and woodworking shall not exceed allowable PM emission rate based on the following equations:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirement

D.6.4 Particulate Matter (PM)

In order to comply with D.6.3, the control equipment for PM control shall be in operation and control emissions from the grinding and machining operations at all times that the grinding and machining operations are in operation.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Four (4) electric induction furnaces, IF1 through IF4
Parameter: Iron throughput
Limit: 34,700 tons per consecutive twelve (12) month period, total, where each ton of steel melted is equal to one tenth (0.1) ton of iron throughput

YEAR: _____

Month	Iron Throughput (tons)	Steel Melted (tons)	Equivalent Iron Throughput = Iron Throughput + (Steel Melted x 0.1) (tons)	Equivalent Iron Throughput = Iron Throughput + (Steel Melted x 0.1) (tons)	Equivalent Iron Throughput = Iron Throughput + (Steel Melted x 0.1) (tons)
	This Month	This Month	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Disaforma molding/pouring line
Parameter: Metal throughput
Limit: 11,826 tons per consecutive twelve (12) month period

YEAR: _____

Month	Metal Throughput (tons)	Metal Throughput (tons)	Metal Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Disamatic molding/pouring line
Parameter: Metal throughput
Limit: 7,750 tons per consecutive twelve (12) month period

YEAR: _____

Month	Metal Throughput (tons)	Metal Throughput (tons)	Metal Throughput (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Seven (7) pedestal wheel grinders
Parameter: Castings throughput
Limit: No more than 10,220 tons per twelve (12) consecutive month period, total

YEAR: _____

Month	Castings throughput (tons)	Castings throughput (tons)	Castings throughput (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Two (2) dual wheel grinders
Parameter: Castings throughput
Limit: No more than 5,840 tons per twelve (12) consecutive month period, total

YEAR: _____

Month	Castings throughput (tons)	Castings throughput (tons)	Castings throughput (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Two (2) isocure processes
Parameter: Resin Usage
Limit: No more than 5,713 pounds per twelve (12) consecutive month period, each, and no more than 9,155 pounds per twelve (12) consecutive month period, total

YEAR: _____

Month	Resin Usage at process 1 (lbs)	Resin Usage at process 2 (lbs)	Total Resin Usage (lbs)	Resin Usage at process 1 (lbs)	Resin Usage at process 2 (lbs)	Total Resin Usage (lbs)	Resin Usage at process 1 (lbs)	Resin Usage at process 2 (lbs)	Total Resin Usage (lbs)
	This Month			Previous 11 Months			12 Month Total		

9 No deviation occurred in this month.
9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Two (2) isocure processes
Parameter: DMEA Usage
Limit: No more than 49,514 pounds per twelve (12) consecutive month period, each, and no more than 79,342 pounds per twelve (12) consecutive month period, total

YEAR: _____

Month	DMEA Usage at process 1 (lbs)	DMEA Usage at process 2 (lbs)	Total DMEA Usage (lbs)	DMEA Usage at process 1 (lbs)	DMEA Usage at process 2 (lbs)	Total DMEA Usage (lbs)	DMEA Usage at process 1 (lbs)	DMEA Usage at process 2 (lbs)	Total DMEA Usage (lbs)
	This Month			Previous 11 Months			12 Month Total		

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: ____________________

Submitted by: ______________________________

Title/Position: ______________________________

Signature: ______________________________

Date: ______________________________

Phone: ______________________________

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Part 70 Operating Permit

Source Name:	**North Manchester Foundry, Inc.**
Source Location:	**205 Wabash Road, North Manchester, Indiana 46962**
County:	**Wabash**
SIC Code:	**3321**
Operation Permit No.:	**T 169-9014-00019**
Permit Reviewer:	**CarrieAnn Paukowits**

On January 1, 2002, the Office of Air Quality (OAQ) had a notice published in the Wabash Plain Dealer, Wabash, Indiana, stating that North Manchester Foundry, Inc. had applied for a Part 70 Operating Permit to operate a stationary gray iron and steel foundry source with baghouses, small filters and a fume scrubber as controls. The notice also stated that OAQ proposed to issue a Part 70 Operating Permit for this operation and provided information on how the public could review the proposed Part 70 Operating Permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Operating Permit should be issued as proposed.

On January 9, 2002, and February 15, 2002, David L. Boyd of North Manchester Foundry, Inc. submitted comments on the proposed Part 70 Operating Permit. The comments are as follows (The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded.**):

Comment 1:

January 9, 2002: Thank you for the opportunity to provide comments during the Public Notice period on the subject air permit. We are asking that effective immediately, you cancel this proposed permit and discontinue all work toward issuing the permit in its present form. It was our understanding in 1997 that upgrading from the FESOP type air permit to the full Part 70 Title V arrangement would result in the permit simplification, flexibility and related agency and company administrative and operation benefits. It appears that we misunderstood the permit conversion concepts and advantages. Please note that an application for renewal of the plant's current FESOP air permit was submitted dated August 24, 2001. We would appreciate you renewing this permit.

February 15, 2002: The proposed air permit for the facility contained several very critical operating issues associated with limits on the annual amount of metal poured and requirements for very difficult, complicated and expensive emissions testing. The company requested that the proposed air permit be canceled and that the current operating permit be renewed instead. Subsequent discussions on January 29, 2002, and other dates developed that there may be options for modifying air permit terms and conditions to address these very critical issues.

Response 1:

All of the issues discussed and included in your comments have been addressed in this addendum. Changes have been made to the permit in response to your comments. As a result of these changes, the source will still comply with all applicable requirements. All changes are described in Responses 2 through 4. As requested in your letter received on October 9, 2001, the FESOP Renewal request will not be processed unless this Title V Operating Permit is not issued.

Comment 2:

An increase in the annual pouring volume may be possible by a shift in limits or volumes associated with the company's casting grinding activities. This may also include restructuring the emissions basis for the grinding unit to a limit based on dust loading in the dust collector exhaust air stream rather than an emission limit per ton of castings cleaned.

Historically, the company has operated this department with a full day shift and lesser staffing for the evening shift and the night shift. At present, the night shift is inactive. Long range plans should be adequate that would provide and emissions limit basis equivalent to full operations for 16 hours per day (2 shifts).

Response 2:

The throughput of metal at the one (1) disaforma molding/pouring line is limited to 11,826 tons per consecutive twelve (12) month period, to limit PM and PM_{10} emissions from the combination of this facility and the one (1) mold making line, also constructed in 1986, to less than 25 tons per year and 15 tons per year, respectively. The throughput of metal at the one (1) disamatic molding/pouring line was limited to 4,292 tons per consecutive twelve (12) month period in the proposed permit so that this limit, in combination with the limit for the seven (7) pedestal wheel grinders and two (2) dual wheel grinders, would limit the potential to emit PM and PM_{10} from these facilities and the one (1) mold making line, all constructed in 1993 or 1994 and all considered part of the same modification, to less than 25 tons per year and 15 tons per year, respectively. Therefore, the 1986 and 1993/1994 modifications are minor modifications to an existing major source, and the requirements of 326 IAC 2-2, PSD, and 40 CFR 52.21 would not be applicable. In order for the source to increase the throughput at the pouring operations, the limit for the seven (7) pedestal wheel grinders and two (2) dual wheel grinders must be reduced so that the potentials to emit PM and PM_{10} from the 1993/1994 modification do not exceed 25 and 15 tons per year, respectively. Since a limit of sixteen (16) hours of operation per day, equivalent to 5,840 hours per year is requested, the limits in Conditions D.2.2, D.3.1 and D.3.10 are revised as follows (see page 1 of 1 of TSD Addendum Appendix A for calculations), the report form for the one (1) disamatic molding/pouring line is revised as shown and the attached report forms for the grinding operations have been added to the permit:

D.2.2 PSD Minor Modification Limit [326 IAC 2-2] [40 CFR 52.21]

(a) The iron throughput to the total of the four (4) electric induction furnaces, IF1 through IF4, shall not exceed 34,700 tons per consecutive twelve (12) month period, where each ton of steel melted is equal to one tenth (0.1) ton of iron throughput. The PM emissions shall not exceed 0.9 pound per ton when melting iron and 0.1 pound per ton when melting steel, and the PM_{10} emissions shall not exceed 0.86 pound per ton when melting iron and 0.09 pound per ton when melting steel. Therefore, the potential to emit PM shall be limited to 15.7 tons per year, which is less than 25 tons per year, and the potential to emit PM_{10} shall be limited to 14.9 tons per year, which is less than 15 tons per year, from the total of the four (4) furnaces, IF1 through IF4, and this modification was a minor modification to an existing major source, pursuant to 326 IAC 2-2, PSD, and 40 CFR 52.21.

(b) The throughput of metal at the one (1) disaforma molding/pouring line shall not exceed 11,826 tons per consecutive twelve (12) month period, the PM emission rate shall not exceed 4.2 pounds per ton of metal throughput, and the PM_{10} emission rate shall not exceed 2.06 pounds per ton of metal throughput. This will limit the potential to emit of PM and PM_{10} from the combination of this facility and the one (1) mold making line, also

constructed in 1986, to less than 25 tons per year and 15 tons per year, respectively. Therefore, this modification is a minor modification to an existing major source, and the requirements of 326 IAC 2-2, PSD, and 40 CFR 52.21 are not applicable.

(c) The throughput of metal at the one (1) disamatic molding/pouring line shall not exceed ~~4,292~~ **7,750** tons per consecutive twelve (12) month period, the PM emission rate shall not exceed 4.2 pounds per ton of metal throughput, and the PM_{10} emission rate shall not exceed 2.06 pounds per ton of metal throughput. This will limit, in combination with the limit in Condition D.3.2, shall limit the potential to emit PM from the total of the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, identified as GR3 and GR4, one (1) disamatic molding/pouring line, and the one (1) mold making line, identified as part of DM1, all considered part of the same modification, to less than 25 tons per year and the potential to emit PM_{10} to less than 15 tons per year from this modification. Therefore, this modification is a minor modification to an existing major source, and the requirements of 326 IAC 2-2, PSD, and 40 CFR 52.21 are not applicable.

D.3.2 PSD Minor Modification Limit [326 IAC 2-2] [40 CFR 52.21]

The **total throughput of castings at** ~~potential to emit PM from~~ the seven (7) pedestal wheel grinders **shall not exceed 10,220 tons per twelve (12) consecutive month period** and **the total throughput of castings at the** two (2) dual wheel grinders shall ~~be limited to less than~~ **not exceed 5,840 tons per twelve (12) consecutive month period, the potential to emit PM shall be limited to less than** 2.40 pounds per hour and the potential to emit PM_{10} shall be limited to less than 2.40 pounds per hour. This limit, in combination with Condition D.2.2(c), shall limit the potential to emit PM from the total of the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, identified as GR3 and GR4, one (1) disamatic molding/pouring line, and the one (1) mold making line, identified as part of DM1, all considered part of the same modification, to less than 25 tons per year and the potential to emit PM_{10} to less than 15 tons per year from this modification. Therefore, this modification is a minor modification to an existing major source, and the requirements of 326 IAC 2-2, PSD, and 40 CFR 52.21 are not applicable.

D.3.10 Record Keeping Requirements

(a) To document compliance with Condition D.3.6, the Permittee shall maintain records of visible emission notations of the shakeout baghouse (DC2) and the seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4) baghouse (DC6) stack exhausts once per shift.

(b) To document compliance with Condition D.3.7, the Permittee shall maintain the following:

(1) Records of the inlet and outlet differential static pressure during normal operation when venting to the atmosphere once per shift.

(2) Documentation of the dates vents are redirected.

(c) To document compliance with Condition D.3.8, the Permittee shall maintain records of the results of the inspections required under Condition D.3.8 and the dates the vents are redirected.

(d) To document compliance with Condition D.3.2, the Permittee shall maintain monthly

records of the castings throughput at the seven (7) pedestal wheel grinders and the two (2) dual wheel grinders.

~~(d)~~**(e)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

The quarterly report form for the disamatic molding/pouring line has been changed as follows:

Facility:	Disamatic molding/pouring line
Parameter:	Metal throughput
Limit:	~~4,292~~ **7,750** tons per consecutive twelve (12) month period

Comment 3:

It is hoped that requirements for very difficult and complicated emissions testing for the melt and pour operations and the muller can be handled by revising the emissions basis toward limiting the dust loading in the dust collector exhaust air flow.

Response 3:

Since the potentials to emit from the disaforma molding/pouring line and disamatic molding/pouring line were computed based on AP-42 emission factors and the emission rates are limited to those factors, no additional testing is needed for the molding/pouring lines. The one (1) muller is controlled by baghouse DC3. Baghouse DC3 also controls the one (1) mold sand handling system. A performance test is required to determine if the one (1) muller is in compliance with the limit set forth in Condition D.4.3 (f). Both the muller and the mold sand handling system must be in operation when the test is conducted so that the test results represent normal operating conditions. Thus, the permit must contain a limit for the combination of the muller and mold sand handling system, with which a performance test can demonstrate compliance. Therefore, Conditions D.2.5 and D.4.3(f) are revised as follows:

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~(a)~~ During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.2.2(a), the Permittee shall perform PM and PM_{10} testing to verify that the furnaces are in compliance with the pound per ton emission limits in Condition D.2.2(a), when melting steel and iron, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. PM_{10} includes filterable and condensible PM_{10}.

~~(b) During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.2.2(b), the Permittee shall perform PM and PM_{10} testing to verify that the molding, pouring and cooling operations at the disaforma~~

~~molding/pouring line are in compliance with the pound per ton emission limits in Condition D.2.2(b), utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. PM_{10} includes filterable and condensible PM_{10}.~~

~~(c) During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.2.2(c), the Permittee shall perform PM and PM_{10} testing to verify that the molding, pouring and cooling operations at the disamatic molding/pouring line is in compliance with the pound per ton emission limits in Condition D.2.2(c), utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. PM_{10} includes filterable and condensible PM_{10}.~~

D.4.3 PSD Minor Modification Limit [326 IAC 2-2] [40 CFR 52.21]

(f) The ~~PM emissions from~~ **outlet grain loading at the baghouse (DC3), controlling** the one (1) muller **and one (1) mold sand handling system, shall not exceed 0.015 grains per dry standard cubic foot and the flow rate shall not exceed 26,000 actual cubic feet per minute. This will limit the potential to emit PM from baghouse DC3** ~~shall be limited~~ to less than 5.71 pounds per hour and the potential to emit PM_{10} ~~emissions shall be limited~~ to less than 3.42 pounds per hour. Therefore, the potential to emit PM is limited to less than 25 tons per year and the potential to emit PM_{10} is limited to less than 15 tons per year from ~~this modification~~ **the addition of the one (1) muller**, and the modification is a minor modification to an existing major source.

Comment 4:

It is hoped that the requirement for emissions testing involving the acid/water fume scrubber serving the two isocure core making machines can be resolved by limiting sand use amount and corresponding VOC emissions on a before controls basis.

The theoretical resin use ratio is 1.5% weight basis on core sand amount running at a 49/51 ratio of Part I to Part II. The theoretical catalyst use ratio is 13% of the total resin amount.

Each isocure unit is rated at 1 ton sand use per hour. Total isocure chemical use for the year 2001 was:

Part I resin - 2,880 pounds
Part II resin - 2,880 pounds
Catalyst - 1,150 pounds

Response 4:

In order to make the requirements of 326 IAC 8-1-6 not applicable, the potential to emit VOC after product usage limitations, but without the use of a control device, must be less than 25 tons per year for each isocure machine. Condition D.4.2(d) has been revised so that the potential to emit VOC before controls is limited to less than 25 tons per year (see page 2 of 2 of TSD Addendum Appendix A) from each of the two (2) isocure processes. The potential to emit VOC is limited to less than 40 tons per year, before controls, for the total of the two (2) isocure processes in Condition D.4.3(a) so that the1980 modification remains a minor modification pursuant to 326 IAC 2-2, PSD (see page

2 of 2 of TSD Addendum Appendix A). Operation of the fume scrubber is not required in order for the two (2) isocure processes to comply with these limits. Therefore, Conditions D.4.7, D.4.9(a), D.4.11(b), D.4.14, D.4.15 and D.4.15(d) have been removed from the permit, Condition D.4.5 is revised, and Section D.4 has been renumbered accordingly. The revised report forms are attached. Changes to the permit are as follows:

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

(d) **In order to render the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable, the following conditions shall apply to the two (2) isocure processes, constructed in 1980:**

(1) The resin usage for each isocure process shall not exceed 5,713 pounds of resin per twelve (12) consecutive month period. DMEA usage for each isocure process shall not exceed 49,514 pounds of DMEA per twelve (12) consecutive month period.

(2) The VOC emissions (not including DMEA) from each of the isocure processes shall not exceed 0.05 pound per pound of resin.

(3) The DMEA emissions from each of the isocure processes shall not exceed 260 pounds per ton of cores.

Therefore, the requirements of 326 IAC 8-1-6 (New facilities; General reduction requirements) shall not apply.

~~Pursuant to Condition D.4.3(a), the input of catalyst to the total of the two (2) isocure processes, constructed in 1980, shall not exceed 87.6 tons per consecutive twelve (12) month period, the catalyst VOC emission rate shall not exceed 20 pounds per ton of catalyst used, and the resin usage shall not exceed 24.0 tons per consecutive twelve (12) month period. Thus, the potential to emit VOC is limited to less than twenty-five (25) tons per year and the requirements of 326 IAC 8-1-6 are not applicable.~~

D.4.3 PSD Minor Modification Limit [326 IAC 2-2] [40 CFR 52.21]

(a) **In order to render the requirements of 40 CFR 52.21 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable, the following conditions shall apply to the two (2) isocure processes, constructed in 1980:**

(1) The resin usage for the total of the two (2) isocure process shall not exceed 9,155 pounds of resin per twelve (12) consecutive month period. DMEA usage for the total of the two (2) isocure process shall not exceed 79,342 pounds of DMEA per twelve (12) consecutive month period.

(2) The VOC emissions (not including DMEA) from the isocure processes shall not exceed 0.05 pound per pound of resin.

(3) The DMEA emissions from the isocure processes shall not exceed 260 pounds per ton of cores.

Therefore, the requirements of 40 CFR 52.21 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) shall not apply.

~~The input of catalyst to the total of the two (2) isocure processes, constructed in 1980, shall not exceed 87.6 tons per consecutive twelve (12) month period, the catalyst VOC emission rate shall not exceed 20 pounds per ton of catalyst used, and the resin usage shall not exceed 24.0 tons per consecutive twelve (12) month period. This will limit the potential to emit VOC from the total of the two (2) isocure processes, constructed in 1980, to less than 40 tons per year, and the requirements of 326 IAC 2-2, PSD, are not applicable.~~

D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the muller, mold sand handling, **and** core sand handling ~~and two (2) isocure processes~~ and their control devices **and the two (2) isocure processes**.

~~D.4.7 Volatile Organic Compounds (VOC)~~

~~In order to demonstrate compliance with Conditions D.4.3(a) and D.4.2(d), the fume scrubber shall be in operation at all times and control catalyst emissions from the two (2) isocure processes at all times when one (1) or both of the two (2) isocure processes are in operation.~~

D.4.~~9~~ **8** Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) ~~During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Conditions D.4.3(a) and D.4.2(d), the Permittee shall perform Dimethylethylamine (DMEA) testing to verify that the catalyst DMEA emission rate does not exceed 20 pounds per ton of catalyst used, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.~~

~~(b)~~ During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.4.3, the Permittee shall perform PM and PM_{10} testing to verify that the muller is in compliance with Condition D.4.3(f), utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. PM_{10} includes filterable and condensible PM_{10}.

D.4.1~~1~~**0** Parametric Monitoring

~~(a)~~ The Permittee shall record the total static pressure drop across the baghouse (DC3) used in conjunction with the muller and mold sand handling, at least once per shift when the shakeout process is in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by

IDEM, OAQ, and shall be calibrated at least once every six (6) months.

~~(b) The Permittee shall take pressure drop, scrubbing liquid (water) flow rate and conductivity readings from the fume scrubber at least once per shift when the isocure processes are in operation. When, for any one (1) reading, the pressure drop is outside the range of 10.0 and 18.0 inches of water, the flow rate for scrubbing liquid is outside the range of 16 and 18 gallons of water per minute, or the conductivity is outside the range of 50,000 and 90,000 milliohms, or a range, flow rate and conductivity established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure drop, flow rate or conductivity reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~The instruments used for determining the pressure, flow rate and conductivity shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~

~~D.4.14 Fume Scrubber Inspections~~

~~An inspection shall be performed each calendar quarter of the scrubber and demister. Defective scrubber and/or demister part(s) shall be replaced. A record shall be kept of the results of the inspection. Inspections are optional when venting to the indoors.~~

~~D.4.15 Fume Scrubber Failure Detection~~

~~In the event that a scrubber failure has been observed the failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions in Section B of this permit.~~

D.4.1~~6~~**3** Record Keeping Requirements

(a) To document compliance with Conditions D.4.3(a) and D.4.2(d), the Permittee shall maintain records of the catalyst and resin usage for each month.

(b) To document compliance with Conditions D.4.3(a) and D.4.2(d), the Permittee shall maintain records of the VOC content of binders used at each of the isocure processes each month.

~~(b)~~**(c)** To document compliance with Condition ~~D.4.10~~ **D.4.9**, the Permittee shall maintain records of visible emission notations of the muller and mold sand handling baghouse (DC3) stack and the small filters controlling the core sand handling exhausts once per shift.

~~(c)~~**(d)** To document compliance with Condition ~~D.4.11~~ **D.4.10**, the Permittee shall maintain the following:

(1) Records of the inlet and outlet differential static pressure for the baghouses during normal operation when venting to the atmosphere once per shift.

(2) ~~Records of the following operational parameters for the fume scrubber during~~

~~normal operation when venting to the atmosphere once per shift:~~

~~(A) Pressure drop;~~

~~(B) Scrubbing liquid flow rate; and~~

~~(C) Conductivity.~~

~~(3)~~ Documentation of the dates vents are redirected.

~~(d)~~**(e)** To document compliance with Condition~~s D.4.12 and D.4.14~~ **D.4.11**, the Permittee shall maintain records of the results of the inspections required under Condition~~s D.4.12 and D.4.14~~ **D.4.11** and the dates the vents are redirected.

~~(e)~~**(f)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Upon further review, the OAQ has decided to make the following changes to the Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded)**:

The following updates have been made to incorporate the Article 2 rule revisions that were adopted on October 3, 2001, and became effective on January 19, 2002. For more information about this rulemaking, refer to the October 2001 Air Pollution Control Board Packet which can be found on the Internet at http://www.state.in.us/idem/air/rules/apcb/packets/index.html. The rule revisions were published in the February 1, 2002 Indiana Register which can be found on the Internet at http://www.IN.gov/legislative/register/index-25.html.

Change 1:

Condition B.2 has had the rule cite 326 IAC 2-1.1-9.5 added to include the new promulgated rule which clarifies when permits expire and when conditions in previous issued permits are superseded, as follows:

B.2 Permit Term [326 IAC 2-7-5(2)] **[326 IAC 2-1.1-9.5]**

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

Change 2:

Condition B.12, Emergency Provisions (a), (b) and (g), have been revised to reflect rule changes to 326 IAC 2-7-16. This section of the rule is now consistent with 40 CFR 70.6(g) and provides an affirmative defense to an action brought for non-compliance with technology-based emission limitations only. The condition is changed as follows:

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation~~, except as provided in 326 IAC 2-7-16~~.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a ~~health-based or~~ technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

~~(g) Operations may continue during an emergency only if the following conditions are met:~~

~~(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.~~

~~(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:~~

~~(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~

~~(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.~~

~~Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~

Change 3:

Condition B.14, Multiple Exceedances, has been deleted because 326 IAC 2-7-5(1)(E) has been repealed because it conflicted with 40 CFR 70.6(a)(6). The permit is revised as follows:

~~B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]~~

~~Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.~~

Change 4:

Condition B.14, Prior Permits Superseded, has been added to the proposed permit to implement the intent of the new rule 326 IAC 2-1.1-9.5 as follows:

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

Change 5:

Paragraph (b) of Condition B.13, Permit Shield, has been deleted because this paragraph is no longer necessary due to the addition of the new Condition B.14, Prior Permits Superceded, as follows:

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

~~(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.~~

Change 6:

In paragraph (c)(2) of Condition C.17, now renamed Compliance Response Plan - Preparation, Implementation, Records, and Reports, "administrative amendment" has been revised to "minor permit modification," because 326 IAC 2-7-11(a)(7) has been repealed. Requests that do not involve significant changes to monitoring, reporting, or record keeping requirements may now be approved as minor permit modifications. References to this condition throughout the proposed permit have been revised to reflect the name change of this condition as follows:

C.17 Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports** [326 IAC 2-7-5] [326 IAC 2-7-6]

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for ~~an administrative amendment~~ **a minor permit modification** to the permit, and such request has not been denied.

D.1.4 Visible Emissions Notations

(a) Visible emission notations of the scrap handling exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the general building ventilation baghouse stack (S1) and the general building exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

D.3.6 Visible Emissions Notations

(a) Visible emission notations of the shakeout, seven (7) pedestal grinders and two (2) dual wheel grinders baghouse stack exhausts (DC2 and DC6) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and

has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

D.3.7 Parametric Monitoring

(a) The Permittee shall record the total static pressure drop across the baghouse (DC2) used in conjunction with the shakeout process (CCS), at least once per shift when the shakeout process is in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(b) The Permittee shall record the total static pressure drop across the baghouses (DC6) used in conjunction with the seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4), at least once per shift when the seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4) are in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are

no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.4.~~10~~**9** Visible Emissions Notations

(a) Visible emission notations of the muller and mold sand handling baghouse stack exhaust (DC3) and small filters controlling the core sand handling shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

D.4.~~11~~**10** Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse (DC3) used in conjunction with the muller and mold sand handling, at least once per shift when the shakeout process is in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this

permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.4.1~~3~~**2** Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.5.3 Visible Emissions Notations

(a) Visible emission notations of the general building ventilation stacks exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - ~~Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

Change 7:

Conditions D.2.8 and D.4.14 have been revised because there is more than one report required to document compliance with Condition D.2.2 and Conditions D.4.3(a) and D.4.2(d). The conditions are revised as follows:

D.2.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report**s** submitted by the Permittee do~~es~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

D.4.14 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.4.3(a) and D.4.2(d) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report**s** submitted by the Permittee do~~es~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Change 8:

Condition D.3.1 has been revised to include the equation used to compute the allowable PM emission rate in Condition D.3.1(a) as follows:

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shakeout operations (CCS) exhausting to baghouse DC2 shall not exceed 50.2 pounds per hour, when operating at a process weight rate of 90 tons of sand and metal per hour.

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shotblaster (CCL1) exhausting to baghouse DC5 shall not exceed 4.10 pounds per hour, when operating at a process weight rate of 1.0 ton of castings per hour.

(c) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shotblaster (CCL2) exhausting to baghouse DC6 shall not exceed 8.56 pounds per hour, when operating at a process weight rate of 3.0 tons of castings per hour.

(d) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the seven (7) pedestal wheel grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) exhausting to baghouse DC6 shall not exceed 5.97 pounds per hour, total, when operating at a process weight rate of 1.75 tons of castings per hour, total.

(e) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the two (2) dual wheel grinders (GR3 and GR4) exhausting to baghouse DC6 shall not exceed 4.10 pounds per hour, total, when operating at a process weight rate of 1.0 ton of castings per hour, total.

(f) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the shotblaster (CCL3) exhausting to baghouse DC7 shall not exceed 7.58 pounds per hour,

when operating at a process weight rate of 2.5 tons of castings per hour.

The pounds per hour limitations **for (b) through (f)** were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The pounds per hour limitation for (a) was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

**$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour**

Change 9:

The equation used for calculating the allowable PM emission rate for process weight rates up to 60,000 pounds per hour has been removed from Condition D.4.1 because the facilities described in Section D.4 have process weight rates greater than 60,000 pounds per hour. Condition D.4.1 is revised as follows:

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the one (1) muller (part of SH) and mold sand handling, exhausting to baghouse DC3, shall not exceed 51.3 pounds per hour, total, when operating at a process weight rate of 100 tons of sand per hour.

(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the core sand handling operations (part of SH) shall not exceed 44.6 pounds per hour, when operating at a process weight rate of 50 tons of sand per hour.

The pounds per hour limitations were calculated with the following equation~~s~~:

~~Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:~~

~~$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour~~

~~or~~

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Change 10:

Condition D.4.8 has been revised to clarify that testing must be repeated every five (5) years, as follows:

D.4.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

During the period between 30 and 36 months after issuance of this permit, in order to demonstrate compliance with Condition D.4.3, the Permittee shall perform PM and PM_{10} testing to verify that the muller is in compliance with Condition D.4.3(f), utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. **This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.** PM_{10} includes filterable and condensible PM_{10}.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Seven (7) pedestal wheel grinders
Parameter: Castings throughput
Limit: No more than 10,220 tons per twelve (12) consecutive month period, total

YEAR: _____

Month	Castings throughput (tons)	Castings throughput (tons)	Castings throughput (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Two (2) dual wheel grinders
Parameter: Castings throughput
Limit: No more than 5,840 tons per twelve (12) consecutive month period, total

YEAR: _____

Month	Castings throughput (tons)	Castings throughput (tons)	Castings throughput (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Two (2) isocure processes
Parameter: Resin Usage
Limit: ~~24.0 tons per consecutive twelve (12) month period~~ **No more than 5,713 pounds per twelve (12) consecutive month period, each, and no more than 9,155 pounds per twelve (12) consecutive month period**, total

YEAR: _____

Month	Resin Usage **at process 1** ~~(tons)~~ **(lbs)**	**Resin Usage at process 2 (lbs)**	**Total Resin Usage (lbs)**	Resin Usage **at process 1** ~~(tons)~~ **(lbs)**	**Resin Usage at process 2 (lbs)**	**Total Resin Usage (lbs)**	Resin Usage **at process 1** ~~(tons)~~ **(lbs)**	**Resin Usage at process 2 (lbs)**	**Total Resin Usage (lbs)**
	This Month			Previous 11 Months			12 Month Total		

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
Part 70 Quarterly Report

Source Name: North Manchester Foundry, Inc.
Source Address: 205 Wabash Road, North Manchester, Indiana 46962
Mailing Address: P.O. Box 345, North Manchester, Indiana 46962
Part 70 Permit No.: T 169-9014-00019
Facility: Two (2) isocure processes
Parameter: ~~Catalyst input~~ **DMEA Usage**
Limit: ~~87.6 tons per consecutive twelve (12) month period~~ **No more than 49,514 pounds per twelve (12) consecutive month period, each, and no more than 79,342 pounds per twelve (12) consecutive month period**, total

YEAR: _____

Month	~~Catalyst Input~~ **DMEA Usage at process 1 ~~(tons)~~ (lbs)**	**DMEA Usage at process 2 (lbs)**	**Total DMEA Usage (lbs)**	~~Catalyst Input~~ **DMEA Usage at process 1 ~~(tons)~~ (lbs)**	**DMEA Usage at process 2 (lbs)**	**Total DMEA Usage (lbs)**	~~Catalyst Input~~ **DMEA Usage at process 1 ~~(tons)~~ (lbs)**	**DMEA Usage at process 2 (lbs)**	**Total DMEA Usage (lbs)**
	This Month			Previous 11 Months			12 Month Total		

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

TSD Addendum Appendix A: Revised Limitations
Gray Iron Foundry

Company Name: North Manchester Foundry, Inc.
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Part 70: T 169-9014
Plt ID: 169-00019
Reviewer: CarrieAnn Paukowits
Date: February 15, 2002

Iron Process	Limited Metal Throughput tons/yr	PM Control
disamatic molding/pouring line	7750	0.0%

SCC 3-04-003-18/3-04-003-20 using AP-42 Emission Factors

	PM	PM10	NOx	SO2	VOC
Emission Factors lbs/ton produced	4.2	2.06	0.01	0.02	0.14
Percentage of Emissions	100.00%	100.00%	100.00%	100.00%	100.00%
Limited Potential to Emit in tons/yr	16.3	7.98	0.039	0.078	0.543

Iron Process	PM Control
Baghouse (DC6)	99.0%

shotblaster (CCL2), seven (7) pedestal wheel grinders, two (2) dual wheel grinders

	PM	PM10	Shot blaster PM allowable 326 IAC 6-3-2 (lbs/hr)	Pedestal wheel grinders PM allowable 326 IAC 6-3-2 (lbs/hr)	dual wheel grinders PM allowable 326 IAC 6-3-2 (lbs/hr)
Grain Loading (gr/dcfm)	0.02	0.02			
Flow Rate (acfm)	14000	14000			
Potential Emissions before Controls lbs/hr	240	240	8.56	5.97	4.10
Potential Emissions before controls tons/yr	1051	1051			
Potential Emissions after Controls lbs/hr	2.40	2.40	8.56	5.97	4.10
Potential to Emit after controls and limitations tons/yr	**7.01**	**7.01**	**Limited to 5,840 hours of operations per twelve (12) consecutive month period**		

Shotblaster Throughput tons/hr	Pedestal Throughput tons/hr	Dual Wheel Throughput tons/hr	Pedestal Throughput @ 5,840 hrs/yr tons/yr	Dual Wheel Throughput @ 5,840 hrs/yr tons/yr
3.00	1.75	1.00	10220	5840

TSD Addendum Appendix A: Revised Limitations
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Isocure Core Making Process

Machine	Date of Construction	Capacity (tons cores/hr)	Maximum Resin Content (%)	VOC Emission Factor from Resin Evaporation (lb/ton cores)	Max DMEA Usage (lb DMEA/ton cores)	Potential VOC Emissions from resin evap (tons/yr)	Potential DMEA Emissions from TEA usage (tons/yr)	Total Potential VOC Emissions (tons/yr)
1	1980	1	1.5%	1.5	260	6.57	1139	1145
2	1980	1	1.5%	1.5	260	6.57	1139	1145
Total		2	1.5%	1.5	260	13.14	2,278	2,291

Limits Necessary to render 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable:

Core Machines	VOC limit (tons/yr)	VOC EF for resin evaporation (lb/ton cores)	VOC EF for resin evaporation (lb VOC/lb resin)	DMEA EF (lb/ton cores)	core production (tons cores/yr)	DMEA usage limit (lbs/yr)	resin usage limit (lbs/yr)
1	24.9	1.5	0.05	260	190	49,514	5,713
2	24.9	1.5	0.05	260	190	49,514	5,713
Total	39.9	1.5	0.05	260	305	79,342	9,155

Instructions:
Note: The maximum DMEA usage should reflect the highest DMEA usage ever used for the worst case core ever produced by the machine.
Note: The maximum resin usage should reflect the highest resin usage ever used for the worst case core ever produced by the machine.

For Isocure cold box core making, the
OCMA study shows an emission factor of 0.65 lb/ton of cores for VOC emissions from resin evaporation, based on 1% resin usage.
As an example, calculations for a source using a maximum of 1% resin would use an emission factor of 1 lb/ton to provide a conservative estimate of uncontrolled emissions so that no stack test would be necessary to verify emissions.
For a source with a maximum resin content of 1.2%, an emission factor of 1.2 lb/ton might be used to provide a conservative estimate so that no stack test would be necessary to verify emissions.
If the OCMA study emission factor of 0.65 lb/ton of cores is used, then a stack test should be required to verify the emissions.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name:	**North Manchester Foundry, Inc.**
Source Location:	**205 Wabash Road, North Manchester, Indiana 46962**
County:	**Wabash**
SIC Code:	**3321**
Operation Permit No.:	**T 169-9014-00019**
Permit Reviewer:	**CarrieAnn Paukowits**

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from North Manchester Foundry, Inc. relating to the operation of a gray iron and steel foundry. A FESOP (F169-6298-00019) was issued to this source on June 25, 1997, and expires on June 25, 2002. The source is now requesting a Title V Permit.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) scrap handling process, constructed in 1968, including one (1) bridge crane and one (1) scale, identified as process SI, not exhausting through a stack, maximum rated capacity: 10 tons of metal per hour.

(b) One (1) melting and casting process consisting of the following emission units and pollution control devices:

(1) One (1) 1.16 million British thermal unit per hour natural gas-fired scrap charge pre-heater, constructed in 1970, identified as CP, exhausting inside the building, some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1.

(2) Three (3) electric induction (scrap iron) furnaces, constructed in 1973 and modified in 1995, identified as IF1, IF2, and IF3, exhausting inside the building, some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, maximum charge rate: 3.6 tons per hour, each.

(3) One (1) electric induction (stainless steel) furnace, constructed in 1966, identified as IF4, maximum charge rate: 1.0 ton per hour.

(4) Four (4) natural gas-fired ladle heaters, constructed in 1970, identified as LH1, LH2, LH3, and LH4, combined maximum capacity: 2.6 million British thermal units per hour, total.

(5) One (1) molding, pouring and cooling line, identified as the disamatic molding/pouring line, part of operation MP, constructed in 1993, with no controls on

emissions and the emissions are exhausted via the production building general ventilation, capacity: 30 tons of molding sand and 5 tons of metal per hour.

(6) One (1) molding, pouring and cooling line, identified as the disaforma molding/pouring line, part of operation MP, constructed in 1986, with no controls on emissions and the emissions are exhausted via the production building general ventilation, capacity: 60 tons of molding sand and 10 tons of metal per hour.

(7) One (1) molding, pouring and cooling line, identified as the pallet line and floor stations, part of operation MP, constructed prior to 1973, with no controls on emissions and the emissions are exhausted via the production building general ventilation, capacity: 6 tons of molding sand and 1 ton of metal per hour.

(c) One (1) shakeout operation, constructed in 1973, identified as operation CCS, with PM and PM_{10} emissions controlled by baghouse DC2 and exhausting through stack S2, maximum capacity: 80 tons of sand and 10 tons of metal per hour.

(d) One (1) cleaning and finishing process consisting of the following emission units and pollution control devices:

(1) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL1, with PM and PM_{10} emissions controlled by baghouse DC5 and exhausting through stack S4, maximum capacity: 1.0 ton of castings per hour.

(2) One (1) casting cleaner shotblaster, constructed in 1968, identified as CCL2, with PM and PM_{10} emissions controlled by baghouse DC6 and exhausting through stack R5, maximum capacity: 3.0 tons of castings per hour.

(3) One (1) shot blast cleaner, constructed in 1974, identified as CCL3, with PM and PM_{10} emissions controlled by baghouse DC7 and exhausting through stack S10, maximum capacity: 2.5 tons of castings per hour.

(4) Seven (7) pedestal wheel grinders, with six (6) constructed in 1993 and one (1) constructed in 1994, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, with PM and PM_{10} emissions from all of the grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.25 ton of castings per hour, each.

(5) Two (2) dual wheel grinders, constructed in 1993, identified as GR3 and GR4, with PM and PM_{10} emissions from both grinders controlled by baghouse DC6 and exhausting through stack R5, maximum throughput: 0.5 ton of castings per hour, each.

(6) One (1) 3.2 million British thermal unit per hour natural gas-fired annealing oven, constructed in 1967, identified as HT1, exhausting through stack S9, maximum capacity: 1.5 tons of iron per hour.

(e) One (1) sand handling process consisting of the following emission units and pollution control devices:

(1) One (1) muller, constructed in 1987, identified as SH, with PM and PM_{10} emissions controlled by baghouse DC3 and exhausting through stack S6 or S6R, maximum capacity: 100 tons of sand per hour.

(2) One (1) mold sand handling system, constructed in 1965, identified as SH, with PM and PM_{10} emissions controlled by baghouse DC3 and exhausting through stack S6, maximum capacity: 100 tons of sand per hour.

(3) One (1) core sand handling system, constructed in 1970, identified as SH, exhausting through stack I3 with some particulate exhausting through small filters, capacity: 50 tons of sand per hour.

(f) One (1) core and mold preparation process consisting of the following emission units and pollution control devices:

(1) Two (2) mold making lines, identified as DM1, one constructed in 1986 with a capacity of 60 tons of sand per hour and one constructed in 1993 with a capacity of 30 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(2) One (1) pallet molding operation, constructed in 1965, capacity: 5 tons of sand per hour. Only sand, clay and water are used in the mold making operation.

(3) Seven (7) shell core making machines, constructed in 1981, identified as part of CM, capacity: 2.0 tons of pre-mixed sand per hour, total.

(4) One (1) air set core machine, constructed in 1997, identified as part of CM, capacity: 1.5 tons of sand, 3.91 pounds of alphaset and 1.30 pounds of alphacure per hour.

(5) Two (2) isocure processes, constructed in 1980, identified as part of CM, with catalyst emissions controlled by a fume scrubber, exhausting through stack S8, capacity: 2.0 tons of sand per hour, 80 pounds of isocure per hour, and 20 pounds of catalyst (Dimethylethylamine) per hour, total.

(6) One (1) 0.5 million British thermal unit per hour (MMBtu/hr) natural gas-fired core baking oven, constructed in 1970, identified as part of CM, exhausting through two (2) stacks, identified as S7A and S7B.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

(g) Inoculation operations, operating since approximately 1973, exhausting inside the building, with some emissions controlled by the general ventilation baghouse DC1, and exiting through the general building exhaust and at stack S1, capacity: 10 tons of metal per hour.

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

There are no new facilities proposed at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Degreasing operations that do not exceed 145 gallons per 12 month period, except if subject to 326 IAC 20-6, including one (1) parts washer, constructed in 1987, equipped with a

lid. There are no halogenated solvents used in the degreasing operations. [326 IAC 8-3-2]

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6-3]

(c) Any of the following structural steel activities, constructed in 1980:

(1) Cutting 200,000 linear feet or less of one inch (1") plate or equivalent. [326 IAC 6-3]

(2) Using 80 tons or less of welding consumables. [326 IAC 6-3]

(d) Grinding and machining operations, constructed in 1980, controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations. [326 IAC 6-3]

(e) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than insignificant activity thresholds:

(1) Maintenance painting, constructed in 1980; core making. [326 IAC 6-3]

(2) Receipt, unloading, storage of molding sand. [326 IAC 6-3]

(3) Pattern Shop woodworking activities, constructed in 1973. [326 IAC 6-3]

(4) Receipt, unloading, storage of sand binders.

(5) Receipt, unloading, storage and handling of core sand and binders.

(6) Air compressor exhaust.

(7) One (1) oil core (hand) operation, constructed in 1973, capacity: 0.5 ton of sand per hour.

(8) One (1) hand dip core wash station, constructed in 1980, using less than 1 ton of isopropanol per year.

(f) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour. There are no boilers at this source.

(g) Combustion source flame safety purging on startup.

(h) VOC and HAP storage containers including vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(i) Refractory storage not requiring air pollution control equipment.

(j) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.

(k) Cleaners and solvents characterized as follows:

(1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100EF); or

(2) Having a vapor pressure equal to or less than 0.7 kPA; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(l) Closed loop heating and cooling systems.

(m) Any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs.

(n) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(o) Process vessel degreasing and cleaning to prepare for internal repairs.

(p) Paved and unpaved roads and parking lots with public access.

(q) Underground conveyors.

(r) Purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(s) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(t) On-site fire and emergency response training approved by the department.

(u) Filter or coalescer media changeout.

(v) A laboratory as defined in 326 IAC 2-7-1(21)(D).

(w) The source also consists of the following activities, considered to be trivial under Part 70 but listed as insignificant activities in the 1997 FESOP:

(1) Building comfort equipment, wash room exhaust fans, ventilation and air conditioning equipment, and hot water heaters.

(2) Cosmetic and maintenance welding.

(3) Building and equipment cleaning and painting.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) OP 85-06-87-0152, issued on March 31, 1983;

(b) CP 169-4073-00019, issued on November 21, 1995;

(c) FESOP 169-6298-00019, issued on June 25, 1997; and

(d) AAF 169-8859-00019, issued on October 2, 1997.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

(a) CP 169-4073-00019, issued on November 21, 1995

(1) Operation Condition 6(a): That pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from the baghouse shall be limited to 12.5 pounds per hour. In addition, pursuant to 326 IAC 2-1-3(i)(8), the pressure drop across the baghouse shall remain within the range of 2 - 10 inches of water. The pressure drop records shall be recorded every hour and made available upon request by this Office of Air Management. If the pressure readings are outside this range, the Permittee shall inspect the system and air pollution control device in accordance with the manufacturer's specifications. The Permittee shall document the cause of the out of range pressure drop, take immediate action to correct any problem, and report the malfunction pursuant to 326 IAC 1-6 (Operation Condition #5). That pursuant to 326 IAC 2-1-3(i)(8), the opacity from the baghouse shall not exceed ten percent (10%) for any six minute average (24 readings taken in accordance with EPA Method 9, Appendix A). This opacity limit shall also satisfy the opacity requirements of 326 IAC 5-1-2.

And

(2) Operation Condition 9: That pursuant to 326 IAC 6-3 (Process Operations), the dust collectors (baghouses) shall be in operation at all times the shot blaster, the grinder, the Nos. 1-3 Mainline furnaces, and the shakeout area when they are in operation.

Reason not incorporated: Operation of the baghouse is not required to demonstrate compliance with any rules or limitations. Pursuant to 326 IAC 6-3-2, the PM emissions from the three (3) electric induction scrap iron furnaces will be limited to no more than 9.67 pounds per hour, each, when operating at a process weight rate of 3.6 tons per hour, each, in this proposed Part 70 permit. The three (3) furnaces are limited separately so that the source can show compliance when any number of the furnaces are operating. The applicant has indicated that the baghouse (DC1) is located in the ceiling and there are no direct ducts from any of the furnaces to the baghouse. The potential to emit before controls (3.24 pounds per hour from each furnace) is less than the allowable PM emissions based on 326 IAC 6-3-2 (9.67 pounds per hour from each furnace). Therefore, the baghouse (DC1) is not necessary to demonstrate compliance with 326 IAC 6-3-2, Process Operations. Operation of the baghouse is also not required to demonstrate compliance with the minor modification limit, which makes the requirements of 326 IAC 2-2 not applicable to the four (4) furnaces. The source will be required to comply with the opacity limitations of 326 IAC 5-1, Opacity, and to operate the control devices for other facilities at all times, but will not be required to comply with a ten percent (10%) opacity limit since that requirement is not necessary to show compliance with any rule.

(b) F 169-6298-00019, issued on June 25, 1997

Source Operation Condition C.1: Pursuant to 326 IAC 2-8, emissions of any regulated pollutant from the entire source shall not exceed 99 tons per 365 day period. Emissions of

hazardous air pollutants (HAP) from the entire source shall not exceed 9 tons per 365 day period for any individual HAP or 24 tons per 365 day period for any combination of HAPs. Emissions shall include those from all emission points at the source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, as long as the total emissions from the source do not exceed the above specified limits. In the event that any condition or combination of conditions in Section D of this permit differs from the above, the most restrictive limit will prevail.

Reason not incorporated: The source has requested a Title V, Part 70, Operating Permit. Therefore, the source is subject to 326 IAC 2-7, Part 70, and the 326 IAC 2-8, FESOP, limits are not required.

(c) F 169-6298-00019, issued on June 25, 1997

Facility Operation Condition D.1.2: Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions to the atmosphere from the scrap handling process listed in Condition A.2(a) shall be limited to 0.68 pounds per hour. The level of contaminants in the scrap used shall be equal or lower than that used during the last stack test which demonstrated compliance.

Reason not incorporated: Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the scrap handling process shall not exceed 19.2 pounds per hour, when operating at a process weight rate of 10 tons per hour. The limit in the FESOP was truncated so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM and PM_{10} less than 100 tons per year. Since this source is a major source pursuant to 326 IAC 2-2, PSD, and 326 IAC 2-7, Part 70, the truncated hourly limits are not necessary. The facility will be required to comply with the hourly PM emission limit computed pursuant to 326 IAC 6-3-2, Process Operations. In addition, the scrap handling process will comply with the 326 IAC 6-3-2 emission limitation in this proposed Part 70 permit without limiting the level of contaminants. The emission factors used are from AP-42, and no process limitations are required to demonstrate compliance.

(d) F 169-6298-00019, issued on June 25, 1997

Facility Operation Condition D.2.2: Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the facilities and operations of the metal melting and casting process listed in Condition A.2(b) shall be limited to 8.82 pounds per hour.

Reason not incorporated: Pursuant to 326 IAC 6-3-2, the PM emissions from the three (3) electric induction scrap iron furnaces shall not exceed 9.67 pounds per hour, each, when operating at a process weight rate of 3.6 tons per hour, each. The particulate matter (PM) from the one (1) electric induction furnace for melting steel shall not exceed 4.10 pounds per hour, when operating at a process weight rate of 1.0 ton per hour. The limit in the FESOP was truncated so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM less than 100 tons per year. This source is a major source pursuant to 326 IAC 2-7, Part 70. Therefore, no truncated pound per hour emission limit is necessary and the melting operations must comply with the hourly emission limitation computed pursuant to 326 IAC 6-3-2.

(e) F 169-6298-00019, issued on June 25, 1997

Facility Operation Condition D.2.3: The PM_{10} emissions from the individual facilities and operations of the melting and casting process listed in Condition A.2(b) shall be limited as follows:

(a) the PM_{10} emissions from the scrap charge preheater, identified as Unit CP, and three scrap iron electric induction furnaces, identified as Unit numbers IF1, IF2, and IF3, controlled by baghouse DC-1, shall be limited to 6.18 lb/hr.

(b) the PM_{10} emissions from the pouring line operation, identified as Unit MP and the shakeout operation of the cleaning and finishing process, identified as operations CCS, both controlled by baghouse DC-2, shall be limited to 3.37 lb/hr.

Reason not incorporated: The PM_{10} limit in the FESOP existed so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM_{10} less than 100 tons per year. This source is a major source pursuant to 326 IAC 2-7, Part 70. Therefore, these PM_{10} emission limitations are not required. The throughput limit at the four (4) electric induction furnaces (IF1 through IF4) will make the requirements of 326 IAC 2-2, PSD, still not applicable.

(f) F 169-6298-00019, issued on June 25, 1997, and AAF 169-8859-00019, issued on October 2, 1997

(1) Facility Operating Condition D.2.5: Each control unit associated with the melting and casting process (Baghouse DC1 and Baghouse DC2) shall be operated at all times the equipment are in operation. Baghouse DC1 shall be operated with the pressure drop range of 4-6 inches of water across the baghouse and baghouse DC2 shall be operated with the pressure drop range of 4-6 inches of water across the baghouse, unless the Office of Air Management determines at a later date, that compliance stack tests, requiring more accurate ranges are necessary. Upon completion of said compliance stack tests, the control units shall then be operated at the operating parameter levels or ranges established during the stack tests. Each control unit listed in this condition may deviate from the pressure drops specified in this condition during the times said control is operating under conditions for which the Preventive Maintenance Plan specifies otherwise. Said operating conditions under the Preventive Maintenance Plan are subject for approval by the IDEM, OAM. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions meeting at a minimum, the requirements of Condition B.13, for when the pressure reading is outside the above mentioned range for any one reading. The instrument used for determining the pressure shall comply with Condition C.9 - Pressure Gauge Specifications, be subject to approval by IDEM, OAM, and be calibrated at least once every six (6) months. These parameters shall be monitored daily when each control unit is in operation. Compliance with this condition shall make the requirements of 326 IAC 2-7 not applicable.

And

(2) Facility Operation Condition D.2.7: In the event that bag failure has been observed, the affected compartments will be shut down immediately until the units have been replaced. Based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

And

(3) Facility Operation Condition D.2.9: The Permittee shall maintain daily records at Baghouse DC1 and Baghouse DC2 of the inlet and outlet differential static pressure, cleaning operational status, blower operational status, and visible observations for a minimum of five (5) years from the date of monitoring. A quarterly summary of this information shall be submitted pursuant to the requirements of Condition D.2.10.

Reason not incorporated: Operation of the baghouse (DC1) is not required for the melting operations to comply with any applicable rules or Conditions of this proposed permit, as explained in (a) of this section. These monitoring and record keeping conditions will be required for the baghouse (DC2) controlling emissions from the shakeout operations.

(g) F 169-6298-00019, issued on June 25, 1997

Facility Operation Condition D.3.2: Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the facilities and operations of the metal cleaning and finishing process listed in Condition A.2(c) shall be limited to 9.95 pounds per hour.

Reason not incorporated: Each cleaning and finishing process has a separate PM emission limitation pursuant to 326 IAC 6-3-2, Process Operations.

(h) F 169-6298-00019, issued on June 25, 1997, and AAF 169-8859-00019, issued on October 2, 1997

Facility Operation Condition D.3.3: The PM_{10} emissions from the facilities and operations of the metal cleaning and finishing process listed in Condition A.2(c) shall be limited as follows:

(a) the PM_{10} emissions from the shakeout operation, identified as CCS, and the pouring line operation of the melting and casting process, identified as Unit MP, both controlled by baghouse DC-2, shall be limited to 3.37 lb/hr.

(b) the PM_{10} emissions from the casting cleaner shotblaster, identified as CCL1, controlled by baghouse DC-5, shall be limited to 1.12 lb/hr.

(c) the PM_{10} emissions from the casting cleaner shotblaster, identified as CCL2, controlled by baghouse DC-6, shall be limited to 0.75 lb/hr.

(d) the PM_{10} emissions from the shot blast cleaner, identified as CCL3, controlled by baghouse DC-7, shall be limited to 1.5 lb/hr.

(e) the PM_{10} from the seven (7) pedestal wheel grinders, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, and the two (2) dual wheel grinders, identified as GR3, and GR4, all controlled by baghouse DC-6, shall be limited to 1.68 lb/hr.

Reason not incorporated: The PM_{10} limit in the FESOP existed so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM_{10} less than 100 tons per year. This source is a major source pursuant to 326 IAC 2-7, Part 70. The PM_{10} emissions from facilities constructed after August 7, 1977, are limited in this proposed permit to make those modifications minor modifications to an existing major source. Therefore, the PM_{10} emission limitations from this previous permit are not

required.

(i) F 169-6298-00019, issued on June 25, 1997, and AAF 169-8859-00019, issued on October 2, 1997

(1) Facility Operation Condition D.3.5: Baghouses DC2, DC4, DC5, DC6, and DC7 shall be operated with the pressure drop range of 4-6 inches of water across the baghouse, respectively, unless the Office of Air Management determines at a later date, that compliance stack tests, requiring more accurate ranges are necessary. Upon completion of said compliance stack tests, the control units shall then be operated at the operating parameter levels or ranges established during the stack tests. Each control unit listed in this condition may deviate from the pressure drops specified in this condition during the times said control is operating under conditions for which the Preventive Maintenance Plan specifies otherwise. Said operating conditions under the Preventive Maintenance Plan are subject for approval by the IDEM, OAM. The Preventive Maintenance Plan for this unit shall contain trouble-shooting contingency and corrective actions meeting at a minimum, the requirements of Condition B.13, for when the pressure reading is outside the above mentioned range for any one reading. The instrument used for determining the pressure shall comply with Condition C.9 - Pressure Gauge Specifications, be subject to approval by IDEM, OAM, and be calibrated at least once every six (6) months. These parameters shall be monitored daily when each control unit is in operation. Compliance with this condition shall make the requirements of 326 IAC 2-7 not applicable.

And

(2) Facility Operation Condition D.3.6: Daily visible emission notations of the units listed in Condition A.2(c) shall be performed daily during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously “normal” means those conditions prevailing, or expected to prevail, 80% of the time the process is in operation, not counting startup or shutdown time, provided that said process is in compliance with all applicable state and federal rules. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain trouble-shooting contingency and corrective actions for when an abnormal emission is observed.

And

(3) Facility Operation Condition D.3.8: A Preventive Maintenance Plan in accordance with Condition B.13 of this permit is required of the facilities listed in Condition A.2(c).

And

(4) Facility Operation Condition D.3.9: The Permittee shall maintain daily records at baghouses DC2, DC4, DC5, DC6 and DC7 of the inlet and outlet differential static pressure, clean operational status, blower operational status, and visible observa-

tions for a minimum of five (5) years from the date of monitoring. A quarterly summary of this information shall be submitted pursuant to the requirements of Condition D.3.10.

Reason not incorporated: These requirements are only applicable to the one (1) baghouse (DC2) controlling the shakeout operations and the one (1) baghouse (DC6) controlling the seven (7) pedestal grinders and two (2) dual wheel grinders. The baghouses (DC2, DC5, DC6 and DC7) must be operated at all times when the equipment listed as exhausting to that baghouse is in operation in order for each facility to comply with 326 IAC 6-3-2, Process Operations. However, since each facility, except the shakeout operations, seven (7) pedestal grinders and two (2) dual wheel grinders, has an allowable PM emission rate less than 10 pounds per hour and there are no limits keeping the facilities out of a particular rule, there is no Preventive Maintenance Plan or mandatory Compliance Monitoring for those facilities and the associated baghouses (DC5 and DC7). Baghouse DC4 does not exist at this source.

(j) F 169-6298-00019, issued on June 25, 1997

Facility Operation Condition D.4.2: Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the facilities and operations of the sand handling process listed in Condition A.2(d) shall be limited to 2.03 pounds per hour.

Reason not incorporated: Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the muller and mold sand handling, exhausting to baghouse DC3, shall not exceed 51.3 pounds per hour, when operating at a process weight rate of 100 tons of sand per hour, and the PM emission rate from the core sand handling system shall not exceed 44.6 pounds per hour, when operating at a process weight rate of 50 tons of sand per hour. The limit in the FESOP was truncated so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM and PM_{10} less than 100 tons per year. Since this source is a major source pursuant to 326 IAC 2-2, PSD, and 326 IAC 2-7, Part 70, the truncated hourly limits are not applicable. The facilities will be required to comply with the hourly PM emission limit computed pursuant to 326 IAC 6-3-2, Process Operations.

(k) F 169-6298-00019, issued on June 25, 1997

Facility Operation Condition D.4.3: The PM_{10} emissions from the facilities and operations of the sand handling process listed in Condition A.2(d) shall be limited as follows:

(a) the PM_{10} emissions from the muller, identified as SH, and the mold sand handling system, identified as SH, both controlled by baghouse DC-3, shall be limited to 4.12 pounds per hour.

Reason not incorporated: The PM_{10} limit in the FESOP existed so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM_{10} less than 100 tons per year. Since this source is a major source pursuant to 326 IAC 2-7, Part 70, this PM_{10} emission limitation is not required. The emissions from the muller are limited in this proposed Part 70 permit to make the construction of the muller and insignificant degreaser in 1987, a minor modification to an existing major source.

(l) F 169-6298-00019, issued on June 25, 1997

Facility Operation Condition D.5.2: Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the facilities and operations of the core and mold

preparation process listed in Condition A.2(e) shall be limited to 1.13 pounds per hour.

Reason not incorporated: The PM limit in the FESOP was truncated so that the total of all hourly emission limits, when operating 8,760 hours per year, would result in a potential to emit PM and PM_{10} less than 100 tons per year. Since this source is a major source pursuant to 326 IAC 2-2, PSD, and 326 IAC 2-7, Part 70, the truncated hourly limits are not applicable. The core and mold sand handling operations will be required to comply with the hourly PM emission limit computed pursuant to 326 IAC 6-3-2, Process Operations.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*. The inoculation process was in operation prior to issuance of the FESOP, but it was not included in the FESOP or any of the previous approvals.

(b) In comments received on December 6, 2000, the applicant indicated that a metal throughput limitation at the scrap handling of 17,600 tons per year is too restrictive because it is only eleven percent (11%) above the amount handled in 1999. This limitation on the scrap handling would allow 5.28 tons of PM per year. Facility Operation Condition D.1.2 of F 169-6298-00019, issued on June 25, 1997, limited PM emissions from the scrap handling process to 0.68 pounds per hour, equivalent to 2.98 tons per year. Therefore, if 5.28 tons per year is only 11% above the emission rate in 1999, the source exceeded the PM emission limitation for scrap handling in the FESOP during 1999.

(c) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on September 22, 1997. Additional information was received on December 1, 1999, December 8, 1999, January 10, 2000, January 21, 2000, August 3, 2000, October 13, 2000, December 6, 2000, February 20, 2001, October 30, 2001, and December 19, 2001.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 12 of 12).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control

equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	**Potential To Emit** (tons/year)
PM	4,317
PM_{10}	3,491
SO_2	11.1
VOC	503
CO	7.75
NO_X	21.0

Note: For the purpose of determining Title V applicability for particulates, PM_{10}, not PM, is the regulated pollutant in consideration.

HAPS	**Potential To Emit** (tons/year)
Lead	0.426
Manganese	3.25
Phosphorus	2.00
Formaldehyde	0.088
Phenol	2.23
Naphthalene	5.29
MDI	0.013
Benzene	0.00007
Dichlorobenzene	0.00004
Hexane	0.059
Toluene	0.0001
Cadmium	0.00004
Chromium	0.00005
Nickel	0.00007
TOTAL	13.4

The potentials to emit (as defined in 326 IAC 2-1.1-1(16)) of PM_{10} and VOC are equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1998 emission statement supplied by the applicant.

Pollutant	**Actual Emissions** (tons/year)
PM	76.1
PM_{10}	39.9
SO_2	3.21
VOC	14.5
CO	0.533
NO_X	7.42
HAPS (Naphthalene)	0.016
HAPS (Formaldehyde)	0.002

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 Operating Permit.

	Limited Potential to Emit (tons/year)						
Process/facility	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPS**
Scrap handling process, constructed in 1968	26.3	15.8	-	-	-	-	-
Scrap charge preheater (CP), constructed in 1970	0.010	0.039	0.003	0.028	0.427	0.508	0.010
Four (4) electric induction furnaces (IF1-IF4), modified in 1995	15.7	14.9	-	-	-	-	1.50
Four (4) ladle heaters (LH1 - LH4)	0.022	0.087	0.007	0.063	0.957	1.14	0.022

	Limited Potential to Emit (tons/year)						
Process/facility	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPS**
Pallet line and floor stations (part of MP), constructed prior to 1973	18.4	9.02	0.088	0.613	-	0.044	0.261
Shakeout operation (CCS), constructed in 1973	220	220	-	-	-	-	-
Casting cleaner shotblaster (CCL1), constructed in 1968	18.0	18.0	-	-	-	-	-
Casting cleaner shotblaster (CCL2), constructed in 1968	37.5	37.5	-	-	-	-	-
Shot blast cleaner (CCL3), constructed in 1974	33.2	33.2	-	-	-	-	-
Seven (7) pedestal grinders and two (2) dual wheel grinders (GR1 - GR9), one (1) mold making line (part of DM1) and one (1) disamatic molding/pouring line (part of MP), all constructed in 1993 or 1994	less than 25	less than 15	0.438	3.07	-	0.219	1.30
Annealing oven (HT1), constructed in 1967	0.027	0.107	0.008	0.077	1.18	1.40	0.027

	Limited Potential to Emit (tons/year)						
Process/facility	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPS**
Muller (part of SH), constructed in 1987	less than 25	less than 15	-	-	-	-	-
Mold sand handling system (part of SH), constructed in 1965	224	224	-	-	-	-	-
Core sand handling system (part of SH), constructed in 1970	195	118	-	-	-	-	-
One (1) mold making line (part of DM1) and one (1) disaforma molding/pouring line (part of MP), both constructed in 1986	less than 25	less than 15	0.876	6.13	-	0.438	2.61
Pallet molding operation, constructed in 1965	-	-	-	-	-	-	-
Seven (7) shell core making machines (part of CM), constructed in 1981	-	-	2.80	25.4	-	4.38	-
Air set core machine (part of CM), constructed in 1997	-	-	2.10	19.1	-	3.29	0.086
Two (2) isocure processes (part of CM), constructed in 1980	-	-	2.80	less than 25	-	4.38	7.52

	Limited Potential to Emit (tons/year)						
Process/facility	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_X**	**HAPS**
Core baking oven (part of CM), constructed in 1970	0.004	0.017	0.001	0.012	0.184	0.219	0.004
Inoculation operations, operating since approximately 1973	78.8	78.8	-	0.219	-	-	-
Insignificant Activities	15.0	15.0	2.00	10.0	5.00	5.00	0.01
Total Emissions	957	829	11.1	89.7	7.75	21.0	13.4

County Attainment Status

The source is located in Wabash County.

Pollutant	Status
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Wabash County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Wabash County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, the fugitive emissions are counted toward determination of PSD applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) Although, the potential to emit PM from the shakeout process after control is less than one hundred (100) tons per year, the PM emissions can exceed one hundred (100) tons per year without violating a permit requirement or applicable rule. However, the Title V permit application was determined to be complete prior to April 20, 1998. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable.

(b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, and 40 CFR Parts 61 and 63) applicable to this source.

(d) There are no halogenated solvents used in the degreasing operations. Therefore, this source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Part 63, Subpart T.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is one of the 28 listed major source categories. The potentials to emit PM and PM_{10} is greater than or equal to one hundred (100) tons per year. Therefore, the source is a major source pursuant to 326 IAC 2-2, Prevention of Significant Deterioration (PSD). This source was a major source pursuant to 326 IAC 2-2, PSD, prior to August 7, 1977. Since construction of this source commenced prior to August 7, 1977, a PSD permit was not required for this source. The PSD applicability for facilities constructed or modified on or after August 7, 1977 is as follows:

(a) The potential to emit VOC at the total of the two (2) isocure processes, constructed in 1980, identified as part of CM, is limited to less than 25 tons per year, after catalyst control by the fume scrubber, in order to make the requirements of 326 IAC 8-1-6, New Facilities; General reduction requirements, not applicable. This limitation is achieved by a limit on catalyst input to the system of no more than 87.6 tons per consecutive twelve (12) month period, a catalyst VOC emission limit of no more than 20 pounds per ton of catalyst used, and a resin usage limit of no more than 24.0 tons per consecutive twelve (12) month period, total, assuming all resin used is emitted as a VOC. This source will comply with this limit by operating the fume scrubber for catalyst control at a minimum control efficiency of ninety-nine percent (99.0 %) at all times when one (1) or both of the two (2) isocure processes are in operation. Therefore, the potential to emit VOC is limited to less than 40 tons per year of VOC from the total of the two (2) isocure processes, insignificant grinding and machining,

insignificant structural steel activities, insignificant painting and insignificant core wash, all constructed in 1980, and this modification was a minor modification to an existing major source. The fume scrubber must operate at all times when one (1) or both of the two (2) isocure processes are in operation in order for the modification in 1980 to remain a minor modification to an existing major source.

(b) The seven (7) shell core making machines, constructed in 1981, identified as part of CM, has a maximum potential to emit less than 40 tons per year of VOC. Therefore, this modification was a minor modification to an existing major source.

(c) The one (1) mold making line, identified as part of DM1, constructed in 1986, does not have the potential to emit VOC since the only materials used are sand, clay and water. The potentials to emit PM and PM_{10} from the one (1) disaforma molding/pouring line, also constructed in 1986, are greater than 25 tons per year and 15 tons per year, respectively. Therefore, the 1986 modification to this source could be a major modification to an existing major source pursuant to 326 IAC 2-2, PSD. The throughput of metal at the one (1) disaforma molding/pouring line is limited to 11,826 tons per consecutive twelve (12) month period, the PM emission rate shall not exceed 4.2 pounds per ton of metal throughput, and the PM_{10} emission rate shall not exceed 2.06 pounds per ton of metal throughput. This will limit the potential to emit PM to less than 25 tons per year and the potential to emit PM_{10} to less than 15 tons per year. Therefore, this modification was a minor modification to an existing major source.

(d) The one (1) muller, constructed in 1987, identified as SH, and the one (1) insignificant degreaser, also constructed in 1987, have a total combined potential to emit less than 40 tons per year of VOC. The potential to emit PM from the one (1) muller shall be limited to less than 5.71 pounds per hour and the potential to emit PM_{10} shall be limited to less than 3.42 pounds per hour. Therefore, the potential to emit PM is limited to less than 25 tons per year and the potential to emit PM_{10} is limited to less than 15 tons per year from this modification, and the modification is a minor modification to an existing major source. The potential to emit of PM and PM_{10} from the one (1) muller is 14.6 tons per year after control by the baghouse (DC3) exhausting to stack S6. Therefore, the one (1) muller will comply with this limit. The baghouse must operate at all times when the one (1) muller is in operation in order for the modification in 1987 to remain a minor modification to an existing major source. An initial stack test will be required to ensure that this limitation is being met.

(e) The seven (7) pedestal wheel grinders, with six (6) constructed in 1993, one (1) constructed in 1994, identified as GR1, GR2, GR5, GR6, GR7, GR8, and GR9, two (2) dual wheel grinders, constructed in 1993, identified as GR3 and GR4, the one (1) mold making line, constructed in 1993, identified as part of DM1, and the one (1) disamatic molding/pouring line, constructed in 1993, are all considered part of the same modification since they all may have been constructed within a year of each other. The potential to emit PM from the seven (7) pedestal wheel grinders and two (2) dual wheel grinders shall be limited to less than 2.40 pounds per hour and the potential to emit PM_{10} shall be limited to less than 2.40 pounds per hour. The throughput of metal at the one (1) disamatic molding/pouring line is limited to 4,292 tons per consecutive twelve (12) month period, the PM emission rate shall not exceed 4.2 pounds per ton of metal throughput, and the PM_{10} emission rate shall not exceed 2.06 pounds per ton of metal throughput. There are no PM or PM_{10} emissions from the mold making process. Therefore, the potential to emit PM is limited to less than 25 tons per year and the potential to emit PM_{10} is limited to less than 15 tons per year from this modification, and the modification is a minor modification to an existing major source. The potential to emit of PM and PM_{10} from the seven (7) pedestal grinders and two (2) dual wheel grinders is less than 2.40 tons per year after control by the baghouse (DC6)

exhausting to stack R5. Therefore, the seven (7) pedestal grinders and two (2) dual wheel grinders will comply with this limit. The baghouse must operate at all times when the seven (7) pedestal grinders and two (2) dual wheel grinders are in operation in order for the modification in 1993/1994 to remain a minor modification to an existing major source.

(f) Pursuant to CP 169-4073-00019, issued on November 21, 1995, the amount of iron produced by the combined production of all furnaces, IF1 through IF4, modified in 1995, was limited to make the modification a minor source pursuant to Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21. The iron throughput in the total of the four (4) electric induction furnaces, IF1 through IF4, shall not exceed 34,700 tons per consecutive twelve (12) month period, where each ton of steel melted is equal to melting one tenth (0.1) ton of iron. The PM emissions shall not exceed 0.9 pound per ton when melting iron and 0.1 pound per ton when melting steel, and the PM_{10} emissions shall not exceed 0.86 pound per ton when melting iron and 0.09 pound per ton when melting steel. Therefore, the potential to emit PM shall be limited to 15.7 tons per year, which is less than 25 tons per year, and the potential to emit PM_{10} shall be limited to 14.9 tons per year, which is less than 15 tons per year, from the total of the four (4) furnaces, IF1 through IF4, and this modification is a minor modification to an existing major source, pursuant to 326 IAC 2-2, PSD. Operation of the baghouse (DC1) is not required in order for the four (4) furnaces to comply with this limit. The equivalency between melting steel and melting iron was computed as follows:

0.1 lb PM/1 ton steel melted; 0.9 lb PM/ 1 ton iron melted = 0.1 lb PM/ X tons iron melted
X = 0.1 ton of iron melted

0.09 lb PM/1 ton steel melted; 0.86 lb PM/ 1 ton iron melted = 0.09 lb PM/ X tons iron melted
X = 0.08 ton of iron melted

Therefore, in the worst case, melting 1 ton of steel is equivalent to melting 0.1 ton of iron.

(g) The one (1) air set core machine, constructed in 1997, identified as part of CM, has a maximum potential to emit less than 40 tons per year of VOC. Therefore, this modification was a minor modification to an existing major source.

326 IAC 2-4.1-1 (New Source Toxics Control)

Since the potential to emit each individual HAP is less than 10 tons per year and the potential to emit any combination of HAPs is less than 25 tons per year, the requirements of 326 IAC 2-4.1-1, New Source Toxics Control, are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM_{10}. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Opacity Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR Part 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2, Process Operations, the source must comply with the following limitations:

(a) The particulate matter (PM) from the scrap handling process shall not exceed 19.2 pounds per hour, when operating at a process weight rate of 10 tons of metal per hour. Since the potential to emit PM from these operations is 6.00 pounds per hour, the scrap handling process will comply with this rule.

(b) The particulate matter (PM) from the three (3) electric induction furnaces for melting iron (IF1 through IF3) shall not exceed 9.67 pounds per hour, each, when operating at a process weight rate of 3.6 tons of metal per hour, each. Since the potential to emit PM from each of these furnaces is 3.24 pounds per hour before controls, the three (3) electric induction furnaces for melting iron will comply with this rule.

(c) The particulate matter (PM) from the one (1) electric induction furnace for melting steel (IF4) shall not exceed 4.10 pounds per hour, when operating at a process weight rate of 1.0 ton of metal per hour. Since the potential to emit PM from these operations is 0.100 pound per hour, the one (1) electric induction furnace for melting steel will comply with this rule.

(d) The particulate matter (PM) from the molding, pouring and cooling operations at the one (1) disamatic molding/pouring line (part of MP) shall not exceed 41.3 pounds per hour, when operating at a process weight rate of 35 tons of sand and metal per hour. Since the potential to emit PM from these operations is 21.0 pounds per hour, the pouring operations at the one (1) disamatic molding/pouring line will comply with this rule.

(e) The particulate matter (PM) from the molding, pouring and cooling operations at the one (1) disaforma molding/pouring line (part of MP) shall not exceed 47.8 pounds per hour, when operating at a process weight rate of 70 tons of sand and metal per hour. Since the potential to emit PM from these operations is 42.0 pounds per hour, the pouring operations at the one (1) disaforma molding/pouring line will comply with this rule.

(f) The particulate matter (PM) from the molding, pouring and cooling operations at the one (1) pallet and floor stations (part of MP) shall not exceed 15.1 pounds per hour, when operating at a process weight rate of 7.0 tons of sand and metal per hour. Since the potential to emit PM from these operations is 4.20 pounds per hour, the pouring and cooling operations at

the one (1) pallet pouring line will comply with this rule.

(g) The particulate matter (PM) from the shakeout operations (CCS) exhausting to baghouse DC2 shall not exceed 50.2 pounds per hour, when operating at a process weight rate of 90 tons of sand and metal per hour. Since the potential to emit PM from these operations is 2.74 pounds per hour after control by the baghouse, the shakeout operations will comply with this rule. The baghouse (DC2) shall be in operation at all times when the shakeout process is in operation in order to comply with this rule.

(h) The particulate matter (PM) from the shotblaster (CCL1) exhausting to baghouse DC5 shall not exceed 4.10 pounds per hour, when operating at a process weight rate of 1.0 ton of castings per hour. Since the potential to emit PM from these operations is 0.514 pound per hour after control by the baghouse, the shotblaster (CCL1) will comply with this rule. The baghouse (DC5) shall be in operation at all times when the shotblaster (CCL1) is in operation in order to comply with this rule.

(i) The particulate matter (PM) from the shotblaster (CCL2) exhausting to baghouse DC6 shall not exceed 8.56 pounds per hour, when operating at a process weight rate of 3.0 tons of castings per hour. Since the potential to emit PM from all operations exhausting to baghouse DC6 is 2.40 pounds per hour after control by the baghouse, the shotblaster will comply with this rule. The baghouse (DC6) shall be in operation at all times when the shotblaster (CCL2) is in operation in order to comply with this rule.

(j) The particulate matter (PM) from the seven (7) pedestal wheel grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) exhausting to baghouse DC6 shall not exceed 5.97 pounds per hour, total, when operating at a process weight rate of 1.75 tons of castings per hour, total. Since the potential to emit PM from all operations exhausting to baghouse DC6 is 2.40 pounds per hour after control by the baghouse, the seven (7) pedestal grinders will comply with this rule. The baghouse (DC6) shall be in operation at all times when the seven (7) pedestal grinders are in operation in order to comply with this rule.

(k) The particulate matter (PM) from the two (2) dual wheel grinders (GR3 and GR4) exhausting to baghouse DC6 shall not exceed 4.10 pounds per hour, total, when operating at a process weight rate of 1.0 ton of castings per hour, total. Since the potential to emit PM from all operations exhausting to baghouse DC6 is 2.40 pounds per hour after control by the baghouse, the two (2) dual wheel grinders will comply with this rule. The baghouse (DC6) shall be in operation at all times when the two (2) dual wheel grinders are in operation in order to comply with this rule.

(l) The particulate matter (PM) from the shotblaster (CCL3) exhausting to baghouse DC7 shall not exceed 7.58 pounds per hour, when operating at a process weight rate of 2.5 tons of castings per hour. Since the potential to emit PM from these operations is 1.29 pounds per hour after control by the baghouse, the shotblaster will comply with this rule. The baghouse (DC7) shall be in operation at all times when the shotblaster (CCL3) is in operation in order to comply with this rule.

(m) The particulate matter (PM) from the one (1) muller (part of SH) and the mold sand handling operations, exhausting to baghouse DC3, shall not exceed 51.3 pounds per hour, total, when operating at a process weight rate of 100 tons of sand per hour. Since the potential to emit PM from all operations exhausting to baghouse DC3 is 3.34 pounds per hour after control by the baghouse, the muller and mold sand handling will comply with this rule. The baghouse (DC3) shall be in operation at all times when the muller is in operation in order to comply with this rule.

(n) The particulate matter (PM) from the core sand handling operations (part of SH) shall not exceed 44.6 pounds per hour, when operating at a process weight rate of 50 tons of sand per hour. Since the potential to emit PM from the core sand handling is 9.00 pounds per hour, after control by the small dust collectors, the core sand handling process will comply with this rule. The small dust collectors shall be in operation at all times when the core sand handling is in operation in order to comply with this rule.

(o) The particulate matter (PM) from the inoculation shall not exceed 19.2 pounds per hour, when operating at a process weight rate of 10 tons of metal per hour. Since the potential to emit PM from these operations is 18.0 pounds per hour, the inoculation operations will comply with this rule.

(p) Since all PM emissions from core making and mold making are from the sand handling process, the core making and mold making facilities are not subject to the requirements of this rule.

These limits are based on the following equations.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

(r) The particulate matter (PM) from the insignificant activities of brazing equipment, cutting torches, soldering equipment, welding, grinding and machining, maintenance painting, receipt, unloading, storage, and woodworking shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The control equipment for PM control shall be in operation and control emissions from the grinding and machining operations at all times that the grinding and machining operations are in operation.

326 IAC 7 (Sulfur Dioxide Emission Limitations)

Since all facilities at this source have a potential to emit less than 25 tons per year and 10 pounds per hour of SO_2, the requirements of 326 IAC 7 are not applicable.

326 IAC 8-1-6 (New facilities; General reduction requirements)

(a) Although the seven (7) shell core making machines were constructed after January 1, 1980 and the potential to emit VOC is greater than 25 tons per year, the requirements of 326 IAC 8-1-6 are not applicable because each shell core making machine is a separate facility and each machine has a potential to emit less than 25 tons per year of VOC.

(b) The potential to emit VOC shall be limited to less than 25 tons per year from the total of the two (2) isocure processes. This limitation is achieved by a limit on catalyst input to the system of no more than 87.6 tons per consecutive twelve (12) month period, a catalyst VOC emission limit of no more than 20 pounds per ton of catalyst used, and a resin usage limit of no more than 24.0 tons per consecutive twelve (12) month period, total, assuming all resin used is emitted as a VOC. This source will comply with this limit by operating the fume scrubber for catalyst control at a minimum control efficiency of ninety-nine percent (99.0 %) at all times when one (1) or both of the two (2) isocure processes are in operation. The limited throughput is equivalent to a potential to emit less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

(c) The potential to emit VOC from the one (1) airset core machine is less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

(d) The one (1) mold making line, identified as part of DM1, constructed in 1986, does not have the potential to emit VOC since the only materials used are sand, clay and water. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

(a) The insignificant degreaser is a maintenance shop parts washer constructed in 1987. Therefore, the requirements of 326 IAC 8-3-2 are applicable. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:

(1) Equip the cleaner with a cover;

(2) Equip the cleaner with a facility for draining cleaned parts;

(3) Close the degreaser cover whenever parts are not being handled in the cleaner;

(4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(5) Provide a permanent, conspicuous label summarizing the operation requirements;

(6) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

(b) The requirements of 326 IAC 8-3-5 are not applicable to the one (1) insignificant parts washer because it was constructed prior to July 1, 1991 in Wabash County.

326 IAC 9-1 (Carbon Monoxide Emission Limitations)

Since all CO emissions at this source result from the preheater, ladle heaters, core baking oven or annealing furnace, the requirements of 326 IAC 9-1 do not apply.

326 IAC 11-1 (Existing Foundries)

Since this foundry does not operate a cupola, the requirements of 326 IAC 11-1 are not applicable.

Testing Requirements

(a) In order to demonstrate compliance with the VOC emission limit for the two (2) isocure machines, the Permittee shall perform VOC testing to verify that the catalyst VOC emission rate does not exceed 20 pounds per ton of catalyst used, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. This test, in addition to records of the amount of resin and catalyst used, will verify that the requirements of 326 IAC 2-2, PSD, and 326 IAC 8-1-6, New Facilities; General Reduction Requirements, are not applicable to the two (2) isocure machines.

(b) The potential to emit PM_{10} is limited to less than 3.42 pounds per hour, equivalent to less than 15.0 tons per year from the one (1) muller, and that modification is a minor modification to an existing major source. The potential to emit PM_{10} from the one (1) muller is 14.6 tons per year after control by the baghouse (DC3) exhausting to stack S6, based on baghouse parameters. Therefore, the one (1) muller will comply with this limit. The baghouse must operate at all times when the one (1) muller is in operation in order for the modification in 1987 to remain a minor modification to an existing major source. An initial stack test will be required to ensure that this limitation and the PM emission limitation of 5.71 pounds per hour are being met.

(c) An initial performance test is required to show that the molding, pouring and cooling operations at the disaforma molding/pouring line are in compliance with the PM emission rate limit of 4.2 pounds per ton and the PM_{10} emission rate limit of 2.06 pounds per ton, utilizing methods as approved by the Commissioner. PM_{10} includes filterable and condensible PM_{10}. This will demonstrate that the facility is part of a modification which is a minor modification to an existing major source, pursuant to 326 IAC 2-2, PSD.

(d) An initial performance test is required to show that the molding, pouring and cooling operations at the disamatic molding/pouring line are in compliance with the PM emission rate limit of 4.2 pounds per ton and the PM_{10} emission rate limit of 2.06 pounds per ton, utilizing methods as approved by the Commissioner. PM_{10} includes filterable and condensible PM_{10}. This will demonstrate that the facility is part of a modification which is a minor modification to an existing major source, pursuant to 326 IAC 2-2, PSD.

(e) The potentials to emit PM and PM_{10} from the four (4) electric induction furnaces, IF1 through IF4, are limited to 15.7 tons per year and 14.9 tons per year, respectively. This limitation makes those units a minor modification pursuant to 326 IAC 2-2, PSD. In order to ensure compliance with these limits, an initial stack test will be required to demonstrate that the PM emission rate is no more than 0.9 pound per ton of iron melted and 0.1 pound per ton of steel melted and the PM_{10} emission rate is no more than 0.86 pound per ton of iron melted and 0.09 pound per ton of steel melted.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) The scrap handling process has applicable compliance monitoring conditions as specified below:

Visible emission notations of the scrap handling exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

(b) The melting and casting process has applicable compliance monitoring conditions as specified below:

Visible emission notations of the general building ventilation baghouse stack (S1) and the general building exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps

for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

(c) The shakeout operations and cleaning and finishing process have applicable compliance monitoring conditions as specified below:

(1) Visible emission notations of the shakeout, seven (7) pedestal grinders and two (2) dual wheel grinders baghouse stack exhausts (DC2 and DC6) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(2) The Permittee shall record the total static pressure drop across the baghouse (DC2) used in conjunction with the shakeout process (CCS), at least once per shift when the shakeout process is in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 1.0 and 5.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(3) The Permittee shall record the total static pressure drop across the baghouses (DC6) used in conjunction with the seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4), at least once per shift when the seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4) are in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(4) An inspection shall be performed each calender quarter of all bags controlling the shakeout operation (CCS), seven (7) pedestal grinders (GR1, GR2, GR5, GR6, GR7, GR8 and GR9) and two (2) dual wheel grinders (GR3 and GR4), when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

(5) In the event that bag failure has been observed:

(A) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(B) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70), and to make the requirements of 326 IAC 2-2 (PSD) not applicable to the nine (9) wheel grinders.

(d) The sand handling and core making operations have applicable compliance monitoring conditions as specified below:

(1) Visible emission notations of the muller and mold sand handling baghouse stack exhaust (DC3) and small filters controlling the core sand handling shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a

violation of this permit.

(2) The Permittee shall record the total static pressure drop across the baghouse (DC3) used in conjunction with the muller and mold sand handling, at least once per shift when the shakeout process is in operation when venting to the atmosphere. When, for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 7.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(3) The Permittee shall take pressure drop, scrubbing liquid (water) flow rate and conductivity readings from the fume scrubber at least once per shift when the isocure processes are in operation. When, for any one (1) reading, the pressure drop is outside the range of 10.0 and 18.0 inches of water, the flow rate for scrubbing liquid is outside the range of 16 and 18 gallons of water per minute, or the conductivity is outside the range of 50,000 and 90,000 milliohms, or a range, flow rate and conductivity established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps. A pressure drop, flow rate or conductivity reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(4) An inspection shall be performed each calender quarter of all bags controlling the muller and mold sand handling, when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

(5) In the event that bag failure has been observed:

(A) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(B) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emer-

gency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(6) An inspection shall be performed each calendar quarter of the fume scrubber. Defective scrubber part(s) shall be replaced. A record shall be kept of the results of the inspection. Inspections are optional when venting to the indoors.

(7) In the event that a scrubber failure has been observed the failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit.

These monitoring conditions are necessary because the baghouses and filters must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70), and to make the requirements of 326 IAC 2-2 (PSD) not applicable to the muller; and the fume scrubber must operate properly to ensure compliance with 326 IAC 2-7 (Part 70) and to make the requirements of 326 IAC 2-2 (PSD) and 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable to the two (2) isocure processes.

(e) The inoculation operations have applicable compliance monitoring conditions as specified below:

Visible emission notations of the general building ventilation stacks exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Conclusion

The operation of this gray iron and steel foundry shall be subject to the conditions of the attached proposed **Part 70 Permit No. T 169-9014-00019.**

Appendix A: Emission Calculations
Gray Iron Foundry

Company Name: North Manchester Foundry, Inc.
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Part 70: T 169-9014
Plt ID: 169-00019
Reviewer: CarrieAnn Paukowits
Date: September 22, 1997

Iron Process	Throughput tons/hr		PM Control	
Scrap & Charge Handling	10.00			0.0%

SCC 3-04-003-15

	PM	PM10	PM allowable 326 IAC 6-3-2 (lbs/hr)
Emission Factors lbs/ton metal charged	0.6	0.36	
Percentage of Emissions	100.00%	100.00%	
Potential Emissions lbs/hr	6.00	3.60	19.2
Potential Emissions tons/yr	26.3	15.8	
Potential Emissions after Controls lbs/hr	6.00	3.60	19.2
Potential Emissions after Controls tons/yr	26.3	15.8	

	Throughputs			
	Total tons/hr	Individual tons/hr	PM Control	
Scrap Iron				
Three (3) Furnaces				0.0%
Electric Induction	10.80	3.60		

SCC 3-04-003-03

	PM	PM10	PM Allowable for each furnace 326 IAC 6-3-2 (lbs/hr)	PM Potential from each furnace (lbs/hr)
Emission Factors (Iron) lbs/ton metal charged	0.9	0.86		
Potential Emissions lbs/hr	9.72	9.29	9.67	3.24
Potential Emissions tons/yr	42.6	40.7		
Potential Emissions after Controls lbs/hr	9.72	9.29	9.67	3.24
Potential Emissions after Controls tons/yr	42.6	40.7		

Steel Furnace Electric Induction
SCC 3-04-007-05

Throughput tons/hr: 1.00

PM Control: 0.0%

	PM	PM10	Allowable PM 326 IAC 6-3-2 (lbs/hr)
Emission Factors (Steel) lbs/ton metal charged	0.1	0.09	
Percentage of Emissions	100%	100%	
Potential Emissions lbs/hr	0.100	0.090	4.10
Potential Emissions tons/yr	0.438	0.394	
Potential Emissions after Controls lbs/hr	0.100	0.090	4.10
Potential Emissions after Controls tons/yr	0.438	0.394	

Iron Process: disamatic molding/pouring line
SCC 3-04-003-18/3-04-003-20

Metal Throughput tons/hr: 5.00
Total Throughput tons/hr: 35.0

PM Control: 0.0%

	PM	PM10	NOx	SO2	VOC	PM allowable 326 IAC 6-3-2 (lbs/hr)
Emission Factors lbs/ton produced	4.2	2.06	0.01	0.02	0.14	
Percentage of Emissions	100.00%	100.00%	100.00%	100.00%	100.00%	
Potential Emissions lbs/hr	21.0	10.3	0.050	0.100	0.70	41.3
Potential Emissions tons/yr	92.0	45.1	0.219	0.438	3.07	
Potential Emissions after Controls tons/yr	92.0	45.1	0.219	0.438	3.07	

Iron Process	Metal Throughput tons/hr	Total Throughput tons/hr	PM Control	0.0%
disaforma molding/pouring line	10.00	70.0		

SCC 3-04-003-18/3-04-003-20

	PM	PM10	NOx	SO2	VOC	PM allowable 326 IAC 6-3-2 (lbs/hr)
Emission Factors lbs/ton produced	4.2	2.06	0.01	0.02	0.14	
Percentage of Emissions	100.00%	100.00%	100.00%	100.00%	100.00%	
Potential Emissions lbs/hr	42.0	20.6	0.100	0.200	1.40	47.8
Potential Emissions tons/yr	184	90.2	0.438	0.876	6.13	
Potential Emissions after Controls tons/yr	184	90.2	0.438	0.876	6.13	

Iron Process	Metal Throughput tons/hr	Total Throughput tons/hr	PM Control	0.0%
Pallet pouring line & floor stations	1.00	7.00		

SCC 3-04-003-18/3-04-003-20

	PM	PM10	NOx	SO2	VOC	PM allowable 326 IAC 6-3-2 (lbs/hr)
Emission Factors lbs/ton produced	4.2	2.06	0.01	0.02	0.14	
Percentage of Emissions	100.00%	100.00%	100.00%	100.00%	100.00%	
Potential Emissions lbs/hr	4.20	2.06	0.010	0.020	0.14	15.1
Potential Emissions tons/yr	18.4	9.02	0.044	0.088	0.613	
Potential Emissions after Controls tons/yr	18.4	9.02	0.044	0.088	0.613	

Iron Process		Throughput tons/hr		PM Control	
		90.0	sand & metal		95.0%

Baghouse (DC2)

shakeout	PM	PM10	PM allowable
Grain Loading (gr/dcfm)	0.02	0.02	326 IAC 6-3-2
Flow Rate (acfm)	16000	16000	(lbs/hr)
Potential Emissions before Controls lbs/hr	54.9	54.9	50.2
Potential Emissions before controls tons/yr	240	240	
Potential Emissions after Controls lbs/hr	2.74	2.74	50.2
Potential Emissions after controls tons/yr	12.0	12.0	

Iron Process		Throughput tons/hr		PM Control	
		1.00			95.0%

Baghouse (DC5)

shotblaster (CCL1)	PM	PM10	PM allowable
Grain Loading (gr/dcfm)	0.02	0.02	326 IAC 6-3-2
Flow Rate (acfm)	3000	3000	(lbs/hr)
Potential Emissions before Controls lbs/hr	10.3	10.3	4.10
Potential Emissions before controls tons/yr	45.1	45.1	
Potential Emissions after Controls lbs/hr	0.514	0.514	4.10
Potential Emissions after controls tons/yr	2.25	2.25	

Iron Process		Shotblaster Throughput tons/hr	Pedestal Throughput tons/hr	Dual Wheel Throughput tons/hr		PM Control
		3.00	1.75	1.00		99.0%
Baghouse (DC6)						
shotblaster (CCL2), seven (7) pedestal wheel grinders, two (2) dual wheel grinders	PM	PM10	Shot blaster PM allowable 326 IAC 6-3-2 (lbs/hr)	Pedestal wheel grinders PM allowable 326 IAC 6-3-2 (lbs/hr)	dual wheel grinders PM allowable 326 IAC 6-3-2 (lbs/hr)	
Grain Loading (gr/dcfm)	0.02	0.02				
Flow Rate (acfm)	14000	14000				
Potential Emissions before Controls lbs/hr	240	240	8.56	5.97	4.10	
Potential Emissions before controls tons/yr	1051	1051				
Potential Emissions after Controls lbs/hr	2.40	2.40	8.56	5.97	4.10	
Potential Emissions after controls tons/yr	10.5	10.5				

Iron Process		Throughput tons/hr		PM Control	
		2.50			95.0%
Baghouse (DC7)					
shotblaster (CCL3)	PM	PM10	PM allowable 326 IAC 6-3-2 (lbs/hr)		
Grain Loading (gr/dcfm)	0.02	0.02			
Flow Rate (acfm)	7500	7500			
Potential Emissions before Controls lbs/hr	25.7	25.7	7.58		
Potential Emissions before controls tons/yr	113	113			
Potential Emissions after Controls lbs/hr	1.29	1.29	7.58		
Potential Emissions after controls tons/yr	5.63	5.63			

Iron Process	Throughput tons/hr		PM Control	95.0%
Baghouse (DC3)	100.00			

muller, mold sand handling	PM	PM10	PM allowable
Grain Loading (gr/dcfm)	0.015	0.015	326 IAC 6-3-2
Flow Rate (acfm)	26000	26000	(lbs/hr)
Potential Emissions before Controls lbs/hr	66.9	66.9	51.3
Potential Emissions before controls tons/yr	293	293	
Potential Emissions after Controls lbs/hr	3.34	3.34	51.3
Potential Emissions after controls tons/yr	14.6	14.6	

Sand Process	Throughput tons sand/hr	Throughput lbs isocure/hr	Throughput lbs catalyst/hr	Catalyst VOC Control	99.0%
Isocure Processes	2.00	80.0	20.0		

3-04-003-19

	SOx	NOx	Allowable PM	VOC	
Emission Factors lbs/ton produced	0.32	0.5	326 IAC 6-3-2	80 lbs isocure	
Percentage of Emissions	100.00%	100.00%	(lbs/hr)	+ 20 lbs catalyst	
Potential Emissions lbs/hr	0.640	1.000	6.52	100	based on 100% of isocure and catalyst emitted as VOC
Potential Emissions tons/yr	2.80	4.38		438	
Potential Emissions after Controls tons/yr	2.80	4.38		24.9	Limit of 24.0 tons of isocure per twelve month period.

AIRS emission factors

Sand Process	Throughput tons sand/hr	Control	0.0%
Shell Cores	2.00		

3-04-003-70

	SOx	NOx	VOC	Allowable PM 326 IAC 6-3-2 (lbs/hr)
Emission Factors lbs/ton produced	0.32	0.5	2.9	
Percentage of Emissions	100.00%	100.00%	100.00%	
Potential Emissions lbs/hr	0.640	1.00	5.80	6.52
Potential Emissions tons/yr	2.80	4.38	25.4	
Potential Emissions after Controls tons/yr	2.80	4.38	25.4	

AIRS emission factors

Sand Process	Throughput tons sand/hr	Control	0.0%
Air Set Cores	1.50		

3-04-003-70

	SOx	NOx	VOC	Allowable PM 326 IAC 6-3-2 (lbs/hr)
Emission Factors lbs/ton produced	0.32	0.5	2.9	
Percentage of Emissions	100.00%	100.00%	100.00%	
Potential Emissions lbs/hr	0.480	0.75	4.35	5.38
Potential Emissions tons/yr	2.10	3.29	19.1	
Potential Emissions after Controls tons/yr	2.10	3.29	19.1	

AIRS emission factors

Steel Process	Throughput tons/hr		PM Control	95.0%
Core Sand Handling	50.00			small dust collectors

SCC 3-04-003-50

	PM	PM10	Allowable PM
Emission Factors lbs/ton sand handled	3.6	0.54	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	(lbs/hr)
Potential Emissions lbs/hr	180.0	27.00	44.6
Potential Emissions tons/yr	788	118	
Potential Emissions after Controls lbs/hr	9.00	1.35	
Potential Emissions after Controls tons/yr	39.4	5.91	

Process	tons/hr		PM Control	0.0%
Inoculation	10.00			

SCC 3-04-003-10

	PM	PM10	VOC	PM allowable
Emission Factors lbs/ton produced	1.8	1.8	0.005	326 IAC 6-3-2
Percentage of Emissions	100.00%	100.00%	100.00%	(lbs/hr)
Potential Emissions lbs/hr	18.0	18.0	0.050	19.2
Potential Emissions tons/yr	78.8	78.8	0.219	
Potential Emissions after Controls lbs/hr	18.0	18.0	0.050	19.2
Potential Emissions after Controls tons/yr	78.8	78.8	0.219	

HAP Emission Calculations
Metal Foundry

Company Name: North Manchester Foundry, Inc.
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Part 70: T 169-9014
Plt ID: 169-00019
Reviewer: CarrieAnn Paukowits
Date: September 22, 1997

HAPs From Iron Melting		HAP Emission Factor (lbs/ton)	Metal Throughput (tons/hr)	Min. Control Eff (%)	Potential HAP Before Controls (tons/yr)	Potential HAP After Controls (tons/yr)
Lead		0.009	10.80	0.00%	0.426	0.426
Manganese		0.0225	10.80	0.00%	1.06	1.06

HAPs From Steel Melting		HAP Emission Factor (lbs/ton)	Metal Throughput (tons/hr)	Min. Control Eff (%)	Potential HAP Before Controls (tons/yr)	Potential HAP After Controls (tons/yr)
Manganese		0.004	1.00	0.00%	0.018	0.018

HAPs From Iron Pouring & Cooling	Percentage of HAP in Castings	PM Emission Factor (lbs/ton)	Metal Throughput (tons/hr)	Min. Control Eff (%)	Potential HAP Before Controls (tons/yr)	Potential HAP After Controls (tons/yr)
Manganese	1.00%	4.2	10.80	0.00%	1.99	1.99
Phosphorus	1.00%	4.2	10.80	0.00%	1.99	1.99

HAPs From Steel Pouring & Cooling	Percentage of HAP in Castings	PM Emission Factor (lbs/ton)	Metal Throughput (tons/hr)	Min. Control Eff (%)	Potential HAP Before Controls (tons/yr)	Potential HAP After Controls (tons/yr)
Manganese	1.00%	4.2	1.00	0.00%	0.184	0.184
Phosphorus	0.05%	4.2	1.00	0.00%	0.009	0.009

HAPs From Air Set Core Machine

Material	Throughput (tons/yr)	HAP	Weight percent	Percent Evaporated	Percent Reacted	Percent Remaining	Potential Emissions (tons/yr)
Alphaset	17.1	Formaldehyde	0.50%	100.00%	0.00%	0.00%	0.086
Alphacure	5.69	None					

HAPs From Two (2) Isocure Processes

Material	Throughput (tons/yr)	HAP	weight percent	Percent Evaporated	Percent Reacted	Percent Remaining	Potential Emissions (tons/yr)
Isocure I-379	350	Phenol	6.36%	0.00%	90.00%	10.00%	2.23
		Napthalene	1.51%	50.00%	0.00%	50.00%	5.29
Isocure II-679	350	MDI	38.50%	0.00%	99.99%	0.01%	0.013
		Napthalene	1.37%	50.00%	0.00%	50.00%	4.80
Isocure 702 - Catalyst (DMEA)	87.6	None					

Summary of HAPs	Potential HAP Before Controls (tons/yr)	Potential HAP After Controls (tons/yr)
Lead	0.426	0.426
Manganese	3.25	3.25
Phosphorus	2.00	2.00
Formaldehyde	0.086	0.086
Phenol	2.23	2.23
Napthalene	5.29	5.29
MDI	0.013	0.013
Total	**13.3**	**13.3**

Methodology

HAP emissions from the metal

Percentage of HAPs in Metal Castings From AP-42

HAP emissions from the core making Resins

Factors from "Form R: Reporting of Binder Chemicals Used in Foundries," American Foundrymen's Society, Inc. & Casting Industry Suppliers Association
Potential emissions are the combination of the evaporative losses and the HAP remaining unreacted.
HAPs remaining in the core after the initial reaction from core making may be emitted during a later process.
The potential isocure usage for this source is 350 tons per year, total. Therefore, the total HAPs from isocure usage is the maximum of the two isocures used.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: North Manchester Foundry, Inc.
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Part 70: T 169-9014
Plt ID: 169-00019
Reviewer: CarrieAnn Paukowits
Date: September 22, 1997

Preheater

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
1.16	10.16

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.010	0.039	0.003	0.508	0.028	0.427

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Ladle heaters

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.60	22.78

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.022	0.087	0.007	1.14	0.063	0.957

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Core Baking Oven

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.50	4.38

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.004	0.017	0.001	0.219	0.012	0.184

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Annealing Furnace

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
3.20	28.03

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.027	0.107	0.008	1.40	0.077	1.18

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 11 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
HAPs Emissions

Company Name: North Manchester Foundry, Inc.
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Part 70: T 169-9014
Plt ID: 169-00019
Reviewer: CarrieAnn Paukowits
Date: September 22, 1997

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	6.86E-05	3.92E-05	2.45E-03	5.88E-02	1.11E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.63E-05	3.59E-05	4.57E-05	1.24E-05	6.86E-05	0.062

Methodology is the same as page 10.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Limited Emission Calculations

Company Name: North Manchester Foundry, Inc.
Address City IN Zip: 205 Wabash Road, North Manchester, Indiana 46962
Part 70: T 169-9014
Plt ID: 169-00019
Reviewer: CarrieAnn Paukowits
Date: September 22, 1997

Construction (or latest modfication) Date	Processes	Unrestricted Potential to Emit Annual Emissions PM (tons/yr)	PM-10 (tons/yr)	VOC (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	CO (tons/yr)	Potential to Emit after Controls and Limitations Annual Emission Equivalent at Maximum Hourly Rates PM (tons/yr)	PM-10 (tons/yr)	VOC (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	CO (tons/yr)	Limiting Factor	Notes
Prior to August 7, 1977	Scrap and Charge Handling (a)	26.3	15.8	0.0	0.0	0.0	0.0	26.3	15.8	0.0	0.0	0.0	0.0	Potential	
	Preheater (b)(1)	0.010	0.039	0.028	0.003	0.508	0.427	0.010	0.039	0.028	0.003	0.508	0.427	Potential	
	Ladle Heaters (b)(4)	0.022	0.087	0.063	0.007	1.14	0.957	0.022	0.087	0.063	0.007	1.14	0.957	Potential	
	Pallet line and floor stations (b)(7)	4.2	2.06	0.140	0.020	0.010	0.0	4.2	2.06	0.140	0.020	0.010	0.0	Potential	
	Shakeout (c)	240	240	0.0	0.0	0.0	0.0	220	220	0.0	0.0	0.0	0.0	326 IAC 6-3-2	PM = PM10
	Casting cleaner shotblaster (CCL1) (d)(1)	45.1	45.1	0.0	0.0	0.0	0.0	18.0	18.0	0.0	0.0	0.0	0.0	326 IAC 6-3-2	PM = PM10
	Casting cleaner shotblaster (CCL2) (d)(2)	1051	1051	0.0	0.0	0.0	0.0	37.5	37.5	0.0	0.0	0.0	0.0	326 IAC 6-3-2	PM = PM10, potential is the total potential of all facilities exhausting through baghouse DC6
	Shotblast cleaner (CCL3) (d)(3)	113	113	0.0	0.0	0.0	0.0	33.2	33.2	0.0	0.0	0.0	0.0	326 IAC 6-3-2	PM = PM10
	Annealing oven (d)(6)	0.027	0.107	0.077	0.008	1.40	1.18	0.027	0.107	0.077	0.008	1.40	1.18	Potential	
	One (1) mold sand handling system (e)(2)	293	293	0.0	0.0	0.0	0.0	224	224	0.0	0.0	0.0	0.0	326 IAC 6-3-2, with muller	PM = PM10, potential is the total potential of all facilities exhausting through baghouse DC3
	One (1) core sand handling system (e)(3)	788	118	0.0	0.0	0.0	0.0	195	118	0.0	0.0	0.0	0.0	326 IAC 6-3-2	
	One (1) pallet molding operation (f)(2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Potential	All PM and PM10 is accounted for in the mold sand handling and muller processes
	One (1) core baking oven (f)(6)	0.004	0.017	0.012	0.001	0.219	0.184	0.004	0.017	0.012	0.001	0.219	0.184	Potential	
	Innoculation operations (g)	78.8	78.8	0.219	0.0	0.0	0.0	78.8	78.8	0.219	0.0	0.0	0.0	Potential	Potential to emit provided by the applicant
	Insignificant woodworking	0.001	0.001	0.0	0.0	0.0	0.0	0.001	0.001	0.0	0.0	0.0	0.0	Potential	Potential to emit provided by the applicant
	Insignificant oil core (hand) operation	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	Potential	Potential to emit provided by the applicant
	Insignificant material handling	7.0	7.0	0.0	0.0	0.0	0.0	7.0	7.0	0.0	0.0	0.0	0.0	Potential	Potential to emit provided by the applicant
	Insignificant paved and unpaved roads	5.0	5.0	0.0	0.0	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	Potential	Potential to emit provided by the applicant
	Total	**2652**	**1965**	**0.5**	**0.04**	**3.28**	**2.75**	**845**	**756**	**0.5**	**0.04**	**3.28**	**2.75**		Source is a major source pursuant to 326 IAC 2-2, PSD
1980	Two (2) isocure units (f)(5)	0.0	0.0	438	2.80	4.38	0.0	0.0	0.0	24.9	2.80	4.38	0.0	326 IAC 2-2 minor limit	Limited potential is after resin and catalyst usage limit and VOC emission limit
	Insignificant grinding and machining	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	Potential	Potential to emit provided by applicant
	Insignificant structural steel activities	0.01	0.01	0.0	0.0	0.0	0.0	0.01	0.01	0.0	0.0	0.0	0.0	Potential	Potential to emit provided by applicant
	Insignificant painting	0.0	0.0	0.01	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	Potential	Potential to emit provided by applicant
	Insignificant core wash	0.0	0.0	1.00	0.0	0.0	0.0	0.0	0.0	1.00	0.0	0.0	0.0	Potential	Potential to emit provided by applicant
1981	Seven (7) shell core making machines (f)(3)	0.0	0.0	25.4	2.80	4.38	0.0	0.0	0.0	25.4	2.80	4.38	0.0	Potential	
1986	One (1) mold making line (f)(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Potential	All PM and PM10 is accounted for in the mold sand handling and muller processes
	Disaforma molding/pouring line (b)(6)	184	90.2	6.13	0.876	0.438	0.0	24.9	14.9	6.13	0.876	0.438	0.0	326 IAC 2-2 minor limit	Limited potential is after metal throughput limit of 11,826 tons per consecutive 12 month period
1987	One (1) muller (e)(1)	293	293	0.0	0.0	0.0	0.0	24.9	14.9	0.0	0.0	0.0	0.0	326 IAC 2-2 minor limit	Potential is the total potential of all facilities exhausting through baghouse DC3
	Insignificant parts washer	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	Potential	Potential to emit provided by applicant
1993 and 1994	Seven (7) pedestal and two (2) dual wheel grinders (d)(4 and 5)	1051	1051	0.0	0.0	0.0	0.0	10.5	10.5	0.0	0.0	0.0	0.0	326 IAC 2-2 minor limit	
	One (1) mold making line (f)(1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Potential	All PM and PM10 is accounted for in the mold sand handling and muller processes
	Disamatic molding/pouring line (b)(5)	92.0	45.1	3.07	0.438	0.219	0.0	14.4	4.40	3.07	0.438	0.219	0.0	326 IAC 2-2 minor limit	Limited potential is after metal throughput limit of 4,292 tons per consecutive 12 month period
1995	Three (3) Electric Induction Scrap Iron Furnaces	42.6	40.7	0.0	0.0	0.0	0.0	15.7	14.9	0.0	0.0	0.0	0.0	326 IAC 2-2 minor limit	
	One (1) Electric Induction Steel Furnace	0.438	0.394	0.0	0.0	0.0	0.0	with above	with above	0.0	0.0	0.0	0.0	326 IAC 2-2 minor limit	
1997	One (1) air set core machine (f)(4)	0.0	0.0	19.1	2.10	3.29	0.0	0.0	0.0	19.1	2.10	3.29	0.0	Potential	
	Overall source total	**4317**	**3491**	**494**	**9.05**	**16.0**	**2.75**	**941**	**821**	**81.1**	**9.05**	**16.0**	**2.75**		

All insignificant activities not included on this list have emissions less than 0.01 ton per year of any criteria pollutant
Total estimated insignificant activity emissions not counted in this table include 2.00 tons per year of SO2, 5.00 tons per year of CO, 5.00 tons per year of NOx and 9.00 tons per year of VOC.